

# **Human Sexuality**

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# **HUMAN SEXUALITY**

**BY**

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**THIS BOOK IS DEDICATED  
To  
My Family,  
The Medical Profession  
And  
EGYPT**

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## FOREWARD

Although it is true that there are regional, cultural, and religious differences with respect to human sexuality, the science of sex speaks with the universal tongue of science. The science of sexology is the same, whether it be Egyptian sexology, American sexology or the sexology of any nationality.

When sexual medicine is not scientific it replaces sexology, the science, with sexosophy, the philosophy of sex. Everyone has his / her own personal sexosophy. It is assimilated from the family, the community, the religion – yes even from the traditions of medicine.

In the 18<sup>th</sup> and 19<sup>th</sup> centuries, Western sexual medicine was based not on scientific sexology, but on a medical sexosophy which was itself based on the medical doctrine of degeneracy as the cause of all disease. Sexual indulgence was claimed to be the prime cause of degeneracy. Total abstinence was the doctrinal ideal. Sexual intercourse was recommended for procreation only, and more than once a month was considered excessive!. Masturbation and seminal emissions in sleep (spermatorrhea) were classified as diseases, all required drastic, dangerous and punitive treatment. The degeneracy they caused could be passed on to all subsequent generations, it was taught!.

The change away from this absurd sexosophy toward the rationality of sexual science was occasioned by one thing more than all the others. This one thing was the discovery of the industrial processing of rubber. It led to the commercial production of the first rubber condom. That was in the 1870s. But the true beginning of the contraceptive age was in the late 1920s, when the first latex rubber condoms were produced. That was barely half a century ago.

Half a century is not time enough for a society to reformulate its sexosophy. It takes longer to accommodate to the new sexual values and ethics made possible to human beings by birth control and planned parenthood. Still today, therefore people in all countries are caught up in a great dispute regarding the merits and demerits of the old sexosophy and the new.

The medical profession like all of society, is caught up in this dispute. In consequence, it is not possible for any book in sexual medicine to be totally, one-hundred percent sexologically scientific. No matter who the author may be, he cannot help but lean now on this side, now on that, of the great sexosophical issues. That is why, in Dr. Aziz Khattab's book, you will find some concepts to agree with, and some to argue with. Fine ! that is why it is a good book.



A good book is always one that makes you think, and challenges your intellect, and changes what you think. In sexosophy you should take nothing for granted, for it is regionally relativistic, and historically subject to change. Examine your own attitudes, and revise them if they are anachronistic. In that way you will serve your patients best.

In sexology also you should take nothing for granted. Like all sciences, sexology is constantly being updated as new experiments are done, and new evidence produced. The rate of change in sexology today is very rapid, especially in the sexology of neuroscience, hormones, and the brain.

Professor Khattab has done a great job in bringing modern sexual medicine into the Egyptian medical school curriculum. It takes courage to contravene the old sexosophy with the new.

Good Luck to This Book.  
May it have many readers.

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## INTRODUCTION

It is well known that writing a book about sexology is not an easy task, but to publish a medical one especially in Egypt I realised is an even harder job... Back from London 1977, I took the opportunity to start editing this volume for the benefit of the medical profession in Egypt as well as in the Arab World.

The idea to publish this work was in my mind all the time since the year 1964; at that time, I was teaching a modest course of sexology as part of the post-graduate medical curriculum. Only in 1977 did I succeed to convince my medical colleagues about the values of a sexology course for the Ain Shams medical students. It is true, I must admit that very few professors were aggressive and even highly critical of this endeavor, but the majority to be honest were encouraging and very enthusiastic, realizing the great need for my scientific adventure specially in Egypt. Now, the book is ready for the thousands of medical students and doctors, who were asking for it and expressing their honest demands for this reference, as such I had to put my lectures on paper. I present this modest work for all, to read, to learn and may be to benefit, so that they may have a stable and happy family life.

Forgive me, this book is not meant only for medical students or doctors... No, it is for all adults, it is for everybody especially parents and teachers. As a matter of fact, it is for everyone male or female who is interested to know the truth about our human sexuality long forgotten in this good part of the world.

I sincerely hope that this piece of scientific work will not offend anyone because of its frankness in such a very sensitive and highly vital medical issue, but I can assure everybody that I have done my utmost to present an honest knowledgeable explanation of such a delicate part of our sexual physiology and anatomy. My friend, Professor Dr. John Money, who is an international authority in the entire field of sexology and a world expert on gender identity kindly forwarded this book while he was in Cairo, 1981. His famous lecture in the Ain Shams Faculty of Medicine, inspired me to complete this work and to write more on the dangers of female circumcision in Egypt and in some parts of Africa.

I have tried through this third edition to add what was recently discovered in the field of sexual medicine over the past ten years. The normal physiological mechanisms of erection in the male is quite evident and well documented now. Male erectile dysfunctions are amenable to better treatment with more new drugs available e.g. Viagra (Sildenafil citrate), pharmacogenic intracavernosal injections for diagnosis and treatment are on the market but must be under medical care. Female genital mutilation has become a national sensitive issue in Egypt especially after the ICPD conference in 1994; and a new decree is issued by the Minister of Health prohibiting its practice by anybody, medical or non medical. The vital role of the external female genitalia in achieving orgasm in



non-circumcised females was confirmed by Johnson and Kaplan. The recent advances in the research of AIDS virus and the possible role of new drugs e.g. AZT to combat the virulence of this epidemic. The unfortunate widespread of AIDS virus (40 millions) in the year 2000 in Africa and Southeast Asia, as well as STDs (sexually transmitted diseases) 320 millions last year ... (WHO reports). The possible role of olfaction in human sexuality through the sex attractant pheromones was discovered in human vaginal secretions reported by Beiber et al.

The ICPD recommendations enforced the NGO (non governmental organizations) to speed their efforts in the field of sex education, reproductive health and the fight against (FGM) female genital mutilation. The question of clitoral versus vaginal orgasm theorised by Freud was finally resolved by the research started by Masters and confirmed by H.S. Kaplan proving that the clitoris is the transmitter and conductor of erotic sensations in females. The international sexual scandal of Monica Lewinsky is mentioned in the chapter of the paraphilias. The reader will note more information through reading, which will add useful and recent sexual knowledge in this third edition.

My experience in this field of medicine as a gynaecologist for the past fifty years, since I was graduated in 1948 (Ksr El Aini) Faculty of Medicine, is presented within this manual together with the sexual research performed internationally. References to most medical statements and research are at hand in my library for any more information.

To replace widespread falsehood with the written truth... To explode many of the old myths of human sexual life... To guide married couples to more complete happiness. I invite the attention of all adult readers to a sober and dignified discussion of female and male sexual behavior.

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# **1**

## **SEX EDUCATION IN MEDICINE**

- **Why teach doctors sexology ?.**
- **Milestones in the history of sexology.**



# **SEX EDUCATION IN MEDICINE**

## **Why Teach Doctors Sexology ?.**

It has been proved that doctors were inadequately trained in the past to treat patients with sexual problems and that the physicians of the future are still being inadequately trained by most medical schools. With increasing success, more and more medical schools added sex education to their curricula and fortunately it was started in Ain Shams Medical School during the year 1978 for the students of the final years; although I taught the post-graduate students in the Forensic, Skin and Venereal departments since the year 1964.

Statistics in U.S.A and Europe revealed that an estimated one tenth of all adult patients the physician sees in his clinic have significant sexual problems. Half of all married couples, experience at one time or another major sexual maladjustments; the severity of the problem is reflected in the current escalating rate of marriage failure or separation and divorce.

Sexual problems are among the most sensitive and embarrassing complaints that patients bring to their physicians involving as they do, profound individual and family values. The doctor who received training and knowledge in human sexuality during his medical training, can help to alleviate much unnecessary suffering and to preserve many of the growing number of marriages which are in serious trouble today. Unfortunately most medical schools in Egypt do not teach sexual medicine up till now...

In recognition of the growing need to prepare a good number of physicians for the task of helping patients with problems related to sexuality, a series of books in the field of sexology especially designed to grasp the vital goals of a sex education program were prepared. Most of the sexual medicine books were developed and written to operate on three levels:

1. The acquiring of healthy sexual information through these medical books.
2. The modification of personal attitudes and the proper correction of already wrong beliefs and sex taboos, particularly in view of the fact that medical students, whether males or females are also subject to embarrassment and discomfort in dealing with sexuality like anybody else.
3. The learning of the necessary skills in dealing with patient's sexual and marital problems.

For several years, it was with concern that many professors noted that the medical profession is not trained to deal with sexual problems. We all know as doctors that problems concerning sexuality is brought by patients daily to our clinics and hospitals or unfortunately never brought at all... Questions and problems concerning the following very sensitive issues:



- 1) Sex education of our children from infancy to adulthood concerning healthy medical information to protect them against drug misuse, abnormal sexual behavior and sexual harassment.
- 2) Adults sexual information before marriage for both males and females.
- 3) Unwanted repeated pregnancies and the dangers of criminal abortion.
- 4) Problems of infertility and its treatment; as well as the right advice as regards the suitable methods of contraception accepted by both husband and wife to avoid population explosion.
- 5) Babies born with sexual anomalies e.g. kryptoorchidism and true or pseudohermaphrodite.
- 6) Questions about masturbation and nocturnal enuresis.
- 7) Questions about female circumcision, described properly now as female genital mutilation and its drastic complications.
- 8) Questions about sexual perversion e.g. homosexuality, lesbianism and oral eroticism.
- 9) How to deal with marital sexual dysfunctions reflected upon many marriages to avoid divorce, separation and marital disruptions.
- 10) Male sexual inadequacy e.g. erectile dysfunction in the husband, premature ejaculation and ejaculatory incompetence.
- 11) Female sexual inadequacy e.g. frigidity, lacking orgasmic capacity, non-resolved sexual tension, vaginismus, dyspareunia and apareunia.
- 12) The normal physiology and anatomy of coitus in both males and females.
- 13) The endocrinological, nervous and physiological responses of the sexually stimulated male and female e.g. sexual dysfunctions in the diabetic and hypertensive patients; not forgetting heart diseases.
- 14) The immense values of precoital petting and the importance of the erogenous zones.
- 15) Effect of prescribed drugs on sexual performance and the false role of aphrodisiacs e.g. Hashish, bango and heroin etc...
- 16) Sexual performance in old age.
- 17) How to avoid sexually transmitted diseases (STDs), as well as AIDS.
- 18) Mental hygiene in sexual behavioral development; the critical phases of lactation and its importance, weaning, toilet training and infantile correction last but not least the critical puberty problems faced by our children.

## **Conclusion**

Not only patients but plenty of people including husbands, wives and couples bring these questions and thousands other problems to their doctors because they are sure that the doctor is an expert ? ... All too often he is not ... and the doctor is unfortunately is as ignorant as his or her patient !...

To be honest, most physicians know more about the anatomy and physiology of the sexual and reproductive organs than their patients who come to them for help. But, few doctors know enough about sex problems and fewer still have been properly trained in the practical and clinical management of sexual problems.

Worst of all, too many physicians still share with their patients the very wrong and false ideas that give rise to sexual problems in the first place. As example, among the most established principles in the entire sexual field is the discovery that guilt feelings about masturbation rather than the act of masturbation itself, that causes emotional distress. Yet, as late as 1949 in the U.S.A. a study among medical students in the Philadelphia Medical School, revealed that half of the medical students still believed that masturbation itself is a frequent cause of mental illness. Worse yet, one fifth of the medical staff of this same medical school shared the same false idea...

It is very hard to see what good can be accomplished, when a patient in need of reassurance consults a doctor who shares his groundless anxieties and ignorance. When branches of medicine are taught in medical schools, progression from the normal physiology to pathology has proved to be the most effective way to teach. Students learn first how the normal heart functions and the many ways in which it can malfunction. In the area of sexual medicine, however, we have had no sure or established framework of the normal physiology of sex to present. But now, that the gap is being bridged by the Masters and Johnson research, it is high time to start the teaching of normal sexology in the human male and female.

Another defect in our teaching of sexology, is the embarrassment the physician feels when dealing with the sexual problems brought to him by his patients. Now, unless the doctor is competent and not biased i.e. knowledgeable and honest, not forgetting being comfortable i.e. he has the time and interest while dealing with these problems, his patients will feel it and the possibility of a successful sex therapy will be diminished or even fail altogether.

By performing sex research in precisely the same way in which research on the heart, the lungs, the kidneys is performed; Masters and Johnson have made it easier for the physician to face sexual problems with the same spirit he applies to other medical problems. They have shown that the intimate facts of the sexual response can be discussed openly and frankly between doctor and patient with dignity as well as respect. This is a valuable lesson for both the medical student and the general practitioner. Finally, specialists and sexologists concerned with medical education have needed a therapeutic model - an example of how a clinic or a physician in private practice can successfully diagnose and treat the common forms of sexual inadequacy, sexual incompatibility and sexual frustration.

Since 1959, Masters and Johnson have been engaged in the treatment of patients complaining of these conditions. One novel and new feature of this approach is that they as a male-female team of therapists treat husband and wife as a patient team. A second feature is their use of retraining procedures - the actual training of husband and wife to use new techniques described in detail for achieving mutual sexual satisfaction. In addition to this the Masters and Johnson techniques provide simultaneously a sort of a psychotherapy treatment for their patients even if it is not structured and formalised in the traditional ways. By their own confidence and frankness, they reduce their patients' anxiety and shyness.



This makes it possible for a husband and wife to talk freely about their sexual problems with the sexologist and with each other and then to do something about it. Once patients feel they have made even a little progress as the result of this combination of psychotherapy and retraining, they feel encouraged to continue further training. Thus, the underlying psychological factors are of great importance in the total approach of sexologists and other doctors as well, to the treatment of sexual inadequacies and psychosexual problems.

Medical students have created much of the momentum of medical sex education, because they are sufficiently different from students of a few decades ago to want this change and similar enough to need it. Like an increasing number of their teachers, many feel that sexuality is part of healthy emotional and physical function in a range of subjects from premarital counselling to post-coronary treatment and counselling. Many experienced practicing physicians are also seeking greater knowledge of sexuality, because they have been confronted by the daily demand for it. This need is now being met to some degree by new efforts in continuing sex education. The aims of health-care professionals at all ages and professional levels increasingly include the ability to:

- Be comfortable with sexual topics and put patients at ease in discussing them.
- Listen well, remember to take a sexual history and know how to take an accurate and useful one.
- Remain aware of patient's feelings and thus avoid creating shame and embarrassment.
- Recognize masked psychosexual problems and the sexual implications of various dysfunctions and courses of treatment.
- Judge whether the sexual implications or problems are within the physician's competence; if they are not refer the patient to an appropriate professional expert.
- Within the competence of an expert, a plan of treatment is set up with the patient's full knowledge and consent.
- Take advantage of the educational and preventive aspects of medical sexual knowledge.

## **Milestones in the History of Sexology**

In the year 1787, the German society was shocked when a famous headmaster by the name of Herr Sprengel published a scientific paper with the following daring title: "**Mystery of nature in the fertilization of flowers**". The poor headmaster was immediately sacked from his post and the paper was condemned and described as trash...

In the **Victorian era**, at the time of Queen Victoria ruling the British Empire, any wife reaching an orgasm during an act of coitus was considered by some as loose and described as a whore or prostitute because sex is for men's pleasure and not for women !!...

During the late 19th century and in the early twenties, **Sigmund Freud** presented his famous sex theory, which caused quite a sensation internationally but he was described unfortunately as a crazy man and ought to be handed to the police!.

In the year 1930 in England, Professor H. Ellis was put in prison after he published his masterpiece book in sexology, namely, "**The Psychology of Sex**".

With the advent of time Professor Alfred Kinsey, an entomologist presented two great books dealing with sex research. "**Sexual behavior in the human male**", which was published in 1948 and he put forward his second book in the year 1952, namely, "**Sexual behavior in the human female**". The two books entailed 18.000 interviews with male and female volunteers, with three most remarkable sex discoveries namely:

1. True frigidity is only 2% among women while the rest sexual inadequacy was truly lacking orgasmic capacity.
2. In the pre-Kinsey era a person was described as either a homosexual or heterosexual but when the facts were published about the sexual life of the American people, it was found that 4% were true homosexuals and another 37% has to be added who have had more than several homosexual encounters !.
3. Bestiality i.e. making or attempting sexual contact with animals, was prevalent among the American public especially with house pet animals, contrary to what was believed.

The publication of the Masters and Johnson report in 1966, on the "**Human Sexual Response**" marks a turning point in the history of sex research. It added a lot of knowledge and scientific data concerning the sexual behavior of the human male and female through their sex research, the physiology of coitus and the stages of the male and female sex cycle were revealed.

In their book "**Human Sexual Inadequacy**", more was described about premature ejaculation and impotency in the male as well as types of frigidity in the female. Their latest research deals with **Lesbianism** i.e. female homosexuality. In 1979, Kaplan's manual "**New Sex Therapy**" was a great step towards the successful treatment of male and female sexual dysfunctions. "**Handbook of sex therapy**" by Joseph Lopiccolo, "**Human Sexuality**" by Morton G. Harmataz, "**Textbook of Sexual Medicine**" by Robert C. Kolodny are valuable as well in this field of sexual medicine.

The societies nowadays have taken a giant step towards the day when human sexuality can be openly taught - to the married and young people, who are going to be married, who need such insight so desperately and to their parents who need it even more, not forgetting our medical students as well as their medical staff.



# **2**

## **THE DEVELOPMENT OF SEXUAL BEHAVIOR**

- **Sigmund Freud and the development of sexuality.**
- **Infant and childhood sexual behavior.**
- **Mental hygiene in sexual development.**
- **Early conditioning and sexual development.**
- **Patterns of sexual behavior.**
- **Endocrine aspects of sexual behavior.**

# THE DEVELOPMENT OF SEXUAL BEHAVIOR

Today, it is generally accepted that sexual behavior does not come naturally to human beings, but is in fact shaped by **social conditioning and learning**, mainly through this conditioning which produces different results in different individuals and societies. Also, there is no longer any doubt that children are capable of sexual responses and that certain early childhood experiences can have a crucial influence on a person's later sexual development. What is true of human physical growth also applies to the development of human sexual behavior. Masculine and feminine attitudes and the preference of certain sexual partners or certain forms of sexual activity are not established once and for all at one particular moment, but are acquired gradually over a period of time. The outcome of this process depends not only on a child's inherited abilities, but also on social influences, such as the reactions of parents, teachers, playmates, and friends. For example, an infant boy may consistently be treated like a girl by his family and thus learn to consider himself a female !... This early **role assignment** may then become irreversible and lead to lifelong difficulties. To put it another way, children whose sex is misdiagnosed at birth for one reason or another learn to identify with the sex that is assigned to them. Furthermore, once a certain critical period of their age has passed, this identification is permanent even if the mistake is later discovered. After a certain age, a boy raised as a girl will continue to consider himself female and in most cases, feel sexually attracted to males, while a girl raised as a boy will continue to consider herself male and, in most cases, feel sexually attracted to females. That is why a person's sexual development has at least three aspects to consider.

1. The male or female characteristics of the body = (**biological sex**).
2. The social role given as male or female = (**gender role**).
3. The preference for male or female sexual partners = (**sexual orientation**).

Even boys and girls who develop the normal and appropriate sexual self-identification may later have traumatic experiences that prevent them from attaining their full sexual potential and lock them into narrow patterns of compulsive or destructive behavior. Also, there are many adults who, after an otherwise healthy development, find themselves strongly inhibited, poorly coordinated, and thus sexually inadequate.

Now, the realization that adult sexual behavior results from a long, complex, and often hazardous development is relatively new. Until about the beginning of our century, sex was believed to be largely instinctive, i.e. the result of biological heredity. Most people simply assume that, at some time after puberty, sexual desire and sexual activity "**come naturally**" to every male and female, and that no social conditioning was involved or necessary. Sexuality was thought to be a "**force of nature**" which appeared suddenly and then, all by itself, found its full "**natural**" expression. People believed that society could



suppress this force, but had no part or role in shaping it. The first serious challenge of this view came from **Sigmund Freud (1856 - 1939 )** and his followers.

According to psychoanalytic thinking, there is a basic sexual instinct or drive present universally in all human beings from the moment of birth. This instinct, which strives for sexual pleasure, is at first diffuse and attains its eventual proper direction and focus only through a process of "**psychosexual maturation**". Human infants first seek their gratification in a direct, unhampered and indiscriminating way, until they learn to modify and control their instinctual urges through social conditioning. Human sexuality thus unfolds under the influence of two opposing forces: the "**pleasure principle**" and the "**reality principle**". In other words, a child's personality development can be described as a contest or struggle between biological drive and cultural constraint or limitation. This contest proceeds in three major steps, which are coordinated with the child's physiological maturation: the **oral, anal, and phallic phases**, which will be described fully within Freud's theory.

## **Sigmund Freud and Sexuality Development**

"Repressed sexual feelings were at the root of all mental illnesses; while in normally adjusted people, sexuality played a predominant part in the functioning of the mind". This daring statement by Freud was pretty inflammatory stuff and so his opponents reacted with horror and disgust. In 1910, at a neurological conference when Freud's name was mentioned, people believed he was crazy and that he saw sex in everything, and ladies blushed when they mentioned his name!. A famous German neurologist stated that, it is a matter for the police to deal with Sigmund Freud and his name should not be mentioned in a scientific meeting...

What Freud really said was that sexual life does not begin at puberty only, but it starts with clear manifestations soon after birth and that the **stages of sexual manifestations are:**

1. During the first year of life, the mouth is the center of pleasurable excitation, that is why it was termed the "**oral phase**" or "oral eroticism". It is divided into two phases, the first is where pleasure involves "sucking" the mother's breasts, but later "bitting" the breast's nipples becomes an important issue. Most mothers who are breast feeders, know too well these two phases and the tendency for everything to go into the mouth of the baby regardless of suitability and the second painful phase of "**oral sadism**". As the infant sucks the mother's breast, it finds not only nourishment, but deep physical and psychological satisfaction. In this phase, the mouth also serves as an organ of exploration, the infant when he puts everything in its mouth is doing so, in order to get to know it. "Taking in" the world, is the first attempt at mastering it.

2. During the third year of life, the anus becomes the chief center of sex excitation and hence it is described as the "**anal phase**". Here, according to Freud, the child gets pleasure "expelling" his faeces at the first part of the anal stage, and later in this phase, from "retaining" its faeces. The child now gaining control over the bowel movements and thereby, indirectly, over the attending adults, whom it can now please or displease by eliminating or withholding faeces. At the same time, the child learns to grant or withhold affection, say yes or no, in short, to master the world by "holding back" and "letting go". It is interesting to note that the anal phase is often coincident with the time of "**toilet training**".

3. While the oral and anal phases, which extend roughly through the first three years of life, are the same for both sexes, the now following "**phallic phase**" (from Greek phallos: penis) brings an increasing awareness of sexual differences between the male and female sex organs. The most pleasurable zones of the body are no longer the mouth or the anus, but the penis for boys and the clitoris for girls. This is the phase in which children become actively curious about their surroundings, they poke their fingers into things, look inside their toys by taking them apart, and also investigate their own and each other's bodies. It is worth reminding here that the pleasure derived from their sexual organs, namely the penis and the clitoris at this age, is different and divorced from ideas of sexual intercourse, and the child is completely ignorant of modes or techniques related to adult mature sexuality. Boys for instance, become interested in the size of their penises and they may even compete as regards the power of their urination!.

4. At around the age of five years, the phallic phase is inhibited by two complexes, namely, the **Oedipus and castration complexes**, who tend to repress the infantile sexuality. The term "**Oedipus complex**" is the child's erotic attachment to the parent of the opposite sex as well as a feeling of rivalry toward the parent of the same sex. The name was related to the legendary Greek King Oedipus who unknowingly killed his father and married his mother. For example, it is the rule for a four- year-old boy to be deeply in love with his mother. She is for him, the only woman he knows and cares to know, however, this woman already has a husband-the father. The boy is jealous of him and would like to push him aside in order to assume his position. This desire is usually expressed openly and spontaneously, as for instance when the boy climbs into his mother's bed announcing: "when I grow up, I'll marry you!." Obviously this situation through the normal development of a child takes another course. The boy replaces his desire to marry his mother with the wish to marry a woman like his mother, and his urge to take the place of his father turns into the determination to become a man like his father. The boy can make this transition easily, if the father provides an attractive model to follow, and if he actively encourages his son to become a healthy man. At the same time, it is the mother's task to help her son realize that she has already chosen and is no longer available as a sexual object. This healthy parental attitude will lead the boy to seek his sexual gratification normally elsewhere when he is mature.



5. In the case of a girl, the development takes the opposite course; she loves her father and is jealous of her mother. The respective psychoanalytic term is "**Electra complex**", after Electra, a legendary Greek princess who, after the death of her beloved father helped to kill her mother who had murdered him.

Freud believed that every child normally progressed from the oral to the anal phase and finally to the phallic phase, unless some negative influence interfered with this sexual development. However, if the particular needs of any one of these phases were either unfulfilled or gratified to excess, the child could become "fixated", and thus hampered in its psychosexual growth. For example, a child's too rigid or over indulgent toilet training could lead to a fixation at the anal level of satisfaction. As an adult such a child would then turn into an "anal character", i.e. a person who is obsessed with discipline, order, and cleanliness; who hoards money, (the unconscious equivalent of faeces, which can be "withheld" from others) and who prefers anal stimulation to all other forms of sexual intercourse. An "oral character", on the other hand, would continue to depend mainly on his mouth even for sexual satisfaction such as deep kissing and/or abnormal oral genital contact. He or she might become a compulsive eater, smoker, or drinker, not forgetting biting nails or lips and thumb sucking. Oral eroticism could be expressed directly in our society and may be of no harm with our culture, but anal eroticism, however, has almost no overt expression other than sexual perversion i.e. sodomy or anal intercourse. One of the few anal eroticism direct expressions is the excessive interest in bowel movements cleverly exploited by drug manufacturers in our society. Children who do not become fixated in this manner eventually reach "**genital maturity**". That is to say, after a so-called latency period, during which obvious sexual interests seem largely suspended, the sexual urge reawakens with puberty arrival and seeks satisfaction through genital intercourse. Oral and anal stimulation may still be enjoyed but to a limited extent, because they now take second place to coitus which, for adults, is the one truly "mature" form of sexual expression.

## **Infant and Childhood Sexual Behavior**

Infants of both sexes may be observed rubbing their sex organs against the bed, the floor, or some toy in a thrusting motion, and there is no doubt that they derive physical pleasure from it. For sometime, they are still unable to coordinate their movements and to use their hands for a more direct stimulation. However, after a while they may learn to do so and begin to masturbate. Quite often, such deliberate masturbation is carried through to the point of orgasm. Kinsey and his co-workers reported that orgasm during masturbation occurred in nine males less than 1 year old. "The behavior involved a series of gradual physiologic changes, the development of rhythmic body movements with distinct penis throbs and thrusts, an obvious change in sensory capacities, a final increased tension of muscles, and a sudden release with convulsions, including rhythmic contractions-followed by disappearance of all symptoms". Bakwin described masturbation in three infant females that appeared to result in the physiologic manifestations of orgasm, including abrupt general relaxation and sweating. Havelock Ellis, cites a paper by West written in 1895, "**Masturbation in Early Childhood**", and one written by Townsend in 1896 on, "Thigh-Friction in children under one year".

### **Infant Masturbation**

Certainly masturbation to the point of orgasm is not a frequent behavior in infancy, but as the child grows, it is likely that identification of genital stimulation as a source of pleasurable sensations leads to repetitive and more attention is given to erotic gratification. As children become able to verbalize their feelings and needs, typically between the ages of 2 and 4 years, quite specific explanations of the pleasing physical and emotional sensations occurring from genital manipulations can be discovered. The child is quick to sense parental attitudes of disapproval toward genital play and may be confused by parental encouragement to be aware of his or her body, but to exclude the genitals from such awareness!. The contradictory messages that the child learns in such a situation may be among the earliest recognizable common determinants of future adult sexual problems.

### **Childhood Masturbation**

A child's orgasmic capacity increases with advancing age, by their fifth birthday, more than half of all boys have reached orgasm, and for boys between 10 and 13 years of age the figure rises to nearly 80%. Naturally, the orgasms of these boys are not yet accompanied by ejaculation, since no seminal fluid is produced before puberty, (even then the ejaculated semen may not contain any sperm cells for sometime). On the other hand, some boys are capable of several orgasms in quick succession, they normally lose, this capacity as they grow older.



## **Male Masturbation**

By the time boys and girls reach the age of 15 years, only about 25% of all girls have masturbated to orgasm, while the comparative figure for boys is nearly 100%! It can be said therefore, that masturbation is a universal experience of male adolescence. However, there is much individual variation as regards the frequency and technique. Some boys masturbate regularly and often, others only occasionally or for a short period of their lives. As for technique, many boys use one or both hands to squeeze and stroke the penis. Some rub it against the bed mattress, a blanket, or a pillow. Others try to approach the feelings of coitus by inserting the penis into the wide mouth of a bottle, a toilet paper tube, or a pair of rolled-up socks. Still others try to take their own penis into their mouth, although they normally find this to be anatomically impossible, (only about 1% of all males can do it). It is not unusual for a boy to experiment with these and similar masturbation techniques and to switch from one to the other, according to the circumstances. However, no matter what method is used, the adolescent male soon learns how to reach orgasm at will.

## **Female Masturbation**

Girls also employ different masturbation techniques. In most cases, they move a finger or the whole hand gently over the clitoris and the surrounding area. Since a prolonged direct stimulation of the clitoris can become painful, many girls prefer to caress the entire vulva. Some of them insert a finger or some round cylindrical object into the vagina and thereby try to approach the experience of coitus. They may also rub the vulva against the corner of a chair, some firm cushion, or mount any suitable seat, e.g. bicycle. There are girls who reach orgasm simply by pressing their thighs closely together while rhythmically moving one leg or contracting the muscles of their buttocks. Hardly any two girls masturbate in quite the same way, or in similar fashion...

It seems that on the whole, fewer girls than boys masturbate to orgasm at any early age. One reason for this may be found in the different anatomy of the two sexes. A penis is comparatively easy to manipulate, and its erection is more difficult to ignore than the mere lubrication of the vagina. A second reason, may be the passive nonsexual attitude that girls learn to adopt as a result of our social conditioning. In our culture, little girls are usually not encouraged to be sexual beings, while many boys are taught how to masturbate by others (mostly older boys), girls usually develop the practice by themselves. Actually, in some instances girls masturbate regularly for years before they find out that this is what they have been doing. They may then be quite shocked and feel guilty about it...

## **Society and Masturbation**

After all, most people in our culture consider masturbation wrong, and in spite of all the propaganda to the contrary, many adolescents still adopt the moral values of their elders. Since most adolescent boys masturbate, the moral problem

is particularly acute for them; they are told not only that masturbation is sinful, but also that it may cause physical or mental ailment. They are sometimes warned that excess masturbation can somehow weaken the body; as a result, many boys feel a double guilt. They seem to displease God and to ruin their health at the same time.

Since ages, the case against masturbation rests mainly on **religious grounds**; traditionally Jews, Christians and Moslems have always disapproved of the practice. In any case, masturbation is definitely bad if it causes fear, shame, anxiety, and guilt. Finally, it should perhaps be mentioned that, occasionally, some adolescents masturbate almost obsessively because they are frustrated, feeling lonely, or bored. They may be under great pressure at home or at school, or they may be experiencing some other nonsexual problem. Masturbation may then become a false escape or an excuse for not facing up to a difficult situation. Obviously, in such a case the underlying problem should be solved, if necessary, with the help of medical counselling.

### **Parents and Masturbation**

Parents who see their boys or girls masturbate make a serious mistake if they become alarmed and shocked about it, reacting wrongly by forcing them to stop under the threat of severe punishment. This will only create needless feelings of guilt in the children because they continue to perform the practice of masturbation in secret, (hence the name). The sexual response is a normal function of the human body at any age and, as such, for many children masturbation is simply part of growing up sexually, and there is no medical reason why they should not be able to stop practicing it.

Another potential source of trouble is the reaction of some parents who are horrified when they discover that their child has been involved in sex play and, in some cases, they feel that such bad behavior deserves **drastic and severe punishment**. This attitude is incomprehensible to children at such an age, and thus they may for the first time in their lives, feel misunderstood, betrayed, and abandoned. They also may become so fearful and suspicious of anything sexual that their further personality development is seriously impaired. Some sensitive children never outgrow such an **early traumatic experience**. It is therefore very fortunate that, in recent years, adult healthy sex education has made great progress and parents generally have now become more understanding and tolerant in these sexual matters.



## Mental Hygiene in Sexual Development

For healthy sexual development to maturity, the factors and conditions involved are nearly the same for both sexes.

### Special Periods in Emotional Development

From the start, the relationship and interaction that a child has with his or her parents is imbalanced. Prior to the baby's birth and even after, the father is an observer only, without direct physical contact with the growing child. Although in some families the father is present at his child's birth, whether in a hospital or at home, more typically the father does not share this experience with his wife or with the newborn. It is regrettably all too common that in most modern societies, this imbalance is accentuated during infancy and childhood, with the father spending significantly less time and having fewer chances and actual instances of physical contact with the child than does the mother. The consequences of this discrepancy of parental contact with the child are not discovered yet, but feedback from parent to child and from child to parent may prove to be important sources for **learning important adaptive social behaviors**.

### Lactation

Precise information about the erotic components of early parent-child interaction is quite sparse, but at least one component of this interaction - **lactation and nursing** - must be recognized as possessing sexual elements. It is common for women to become sexually aroused during nursing and suckling their infants, and such erotic arousal may precipitate reactions ranging from pleasure, satisfaction, guilt or fear. While many men regard suckling or nursing as simply a natural means of providing nutrition, some men may be upset because they interpret the act of nursing or suckling as a sexual stimulus to their wife or to their child; others find the act of nursing to be sexually stimulating to themselves. Nursing in the presence of others similarly produces, in those others, varied reactions that presumably have nothing to do with the actual act of feeding a child, since publicly bottle feeding an infant provokes no cries of indecency. The sexual symbolism of the breast and the act of suckling are not easily separated from our evolutionary heritage as mammals.

Since lactation is the only source for the existence of the infant, this animal existence and dependence upon the breasts of the mother or the milk bottle, continues and last till the critical time of **weaning**. Now, the baby learns for the first time the feelings of rage, anger, fear, anxiety and hate; because she or he was deprived of the breast or the bottle. **Substitute gratification** is the only consolation for the baby at this critical time, no wonder, thumb sucking or the rubber teat become their sole pleasure for sometime to come, even to adult-hood and a good example is the lolly-pup sweets preferred by some adults!.

## **Toilet Training**

Both ends of the gastro-intestinal tract are pleasurable to the baby and are accepted well by his or her mother or nanny; suddenly, the mother or the society approves only of one end, namely the mouth and describes the other end, the anus and the excreta as disgusting and aversion linked. Also, the genitals are considered private all of a sudden and secretive, then; the threats and punishment the baby receives during toilet training may be mild or severe. But, the sexual organs will always remain associated with dirt, secrecy, privacy and guilt feelings, depending upon the degree of threats and the punishment's severity.

## **Infantile Correction**

Naturally, the infant explores his or her body and the sex organs as well; at once, he or she is met with disapproval, even horror, and sometimes punishment depending upon the culture and the mentality of the parents involved. This severe infantile correction reinforces the previous lesson of toilet training in linking and associating the sexual organs with dirt, not nice and private, including masturbation. No wonder that the sexual urge at maturity is usually associated with a sense of guilt, defilement, sin and penance. A good example, is the resultant frigidity of many women who submit sexually to their husbands only as a duty and not for a pleasurable coitus. They may suffer as such from dyspareunia, vaginismus and they sometimes refuse coitus altogether (apareunia).

## **Anatomical Loss**

Girls become aware and conscious very early about their anatomy and they feel mutilated and anxious for the loss of the penis. They phantasize plenty and compensate for this inferiority complex or **mutilation complex** by the spectacular sexual achievements of puberty and they then feel better than boys due to the development of the secondary sexual characters, e.g. breasts.

## **Puberty**

Since the physical changes of puberty may appear early or late, quickly or slowly; individuals of the same chronological age may find themselves in very different stages of development. For an adolescent, this is often a matter of great concern, boys may worry about their height, the breadth of their shoulders, the strength of their muscles and the size of their penis. Girls may be afraid of growing too tall, and they may anxiously measure the size of their breasts and the width of their hip. Indeed, during this period, young people tend to become extremely sensitive and self-conscious about their appearance, especially if they gain too much weight or due to the presence of acne. Another potential source of embarrassment is the heightened sexual responsiveness, for example, boys may resent the fact that they have sudden erections at very awkward moments. Paradoxically, the sexual awareness of girls lags well behind that of boys. While the secondary sexual characteristics may appear much earlier in females than in



males, the female capacity for sexual arousal and orgasm often develops much later. Unfortunately, many parents still allow their girls to menstruate for the first time without knowledge or education; it is a major psychological crime that happen around menarche, which is seldom forgotten or forgiven by the unhappy girl.

### **Libido at Maturity**

At maturity, the sexual urge is present but under the surface, it is fierce nevertheless, but restrained due to society rules and family laws. The teenagers, boys and girls do not easily accept these restraints, no wonder, they revolt and the older generations are alarmed as well as puzzled. Truly the parents and the society need not to be worried, because they should remember and realize the long delay young people in our culture face to get married. Many of them cannot achieve complete legal and economic independence until 5, 10, or even 20 years after puberty. To a great extent, this delay is of course, unavoidable because of the growing complexity of the modern world. As a result, they are forced to go through a difficult period of sexual frustration and there can be no doubt that the sexual oppression of the young creates much genuine misery.

Thus, for many adolescents solitary masturbation is the only available outlet, although some boys may occasionally masturbate in small groups. Some do experiment with various **petting** techniques, and others turn to homosexual contacts as a temporary substitute. A few boys who live in the countryside may also have sexual contact with various animals.

"On the whole, adolescent girls engage in much less sexual activity than adolescent boys"; one reason for this is the double standard of morality which threatens females with much harsher punishment for sexual infractions than males... It is true that they are taught to be sexually attractive, to move gracefully, to dress seductively, to experiment with beautiful hairstyles, and to use fascial makeup. Indeed, they tend to fantasize about their future roles as brides, wives, and mothers; at other times, they dream about some ideal lover or some romantic situation, in short, they are less concerned with the physical aspects of sex than with its social implications.

## Early Conditioning and Sexual Development

Apart from theoretical considerations regarding infant sexual physiology, a number of observations provide an instructive view. Personnel working in a delivery ward such as doctors and nurses or in a newborn nursery are all familiar with the fact that newborn males have spontaneous erections; newborn females have vaginal lubrications which parallel the vasocongestive mechanism that produces erections in the male. These examples of early physiologic function in the sexual apparatus are clearly not learned events but represent an activation of inborn reflex responses in just the same way that an infant does not learn to sweat, to breathe, to digest, or to urinate. The implications of this statement are clear "**Sexual functioning is a natural process**".

As the newborn grows and is exposed to relationships with others, including parents, as the personality and psyche of the child pass through adolescence and into childhood; and as cultural taboos are translated into personal values and attitudes about sex, many complicating variables will potentially exert harmful effects on the naturalness of sexual function. As a result, sexual problems or sexual dysfunction can appear. Just as the price of civilization over a primitive society may be increased, cardiovascular mortality or a higher incidence of peptic ulcer disease, so the complexities of civilization lead eventually to sexual difficulties.

It is, of course true that all human beings are born with the capacity to respond to many kinds of sensual stimulation. We also mentioned that erections of the penis, the lubrication of the vagina, muscular contractions, and rhythmic pelvic movements can be observed in very young infants. In short, nobody has to learn the physiological responses that lead to orgasm. Still, everybody does learn under which specific circumstances these responses may be triggered. From their first years of life, children learn to react positively to certain stimuli and negatively to certain others. As a result of their **personal experiences**, they then acquire their individual sexual behavior patterns. Thus, human beings learn to be masculine or feminine, heterosexual or homosexual. They also learn to masturbate, to engage in coitus, and to feel happy or guilty about sex. They learn to prefer younger or older partners, blondes or brunettes, Europeans, Africans or Asians. Some persons develop a strong attachment to one particular partner and are unable to respond to anyone else, others change their partners frequently. Some like variety in their erotic techniques, others stick to a single approach throughout their lives. Some men and women depend on complete privacy for their sexual responsiveness, others find additional stimulation in the knowledge that they are being watched. There are people whose sexual advances are passionate, inconsiderate, and even brutal; and there are others who enjoy making love slowly, gently, and deliberately. Certain individuals may even prefer solitary masturbation to any sexual intercourse, and certain others may seek sexual contact with animals...

Since these and many other **personal sexual interests, choices, and preferences** are developed through learning, they may appear natural, reasonable and indeed, inevitable to the person involved. Even sexual behavior which seems outrageous, fantastic, meaningless or absurd to most people may be meaningful and rewarding to a certain individual because of the way in which he has been conditioned. A man who becomes excited sexually at the sight of a wooden horse!, may merely reflect some early experience in childhood in which sexual pleasure was associated with a merry-go round, and his behavior as such may be no more difficult to explain than that of another man who becomes sexually aroused while watching a striptease show?. The latter male sexual response may have a certain advantage over the former, because we consider it normal for the majority of males, but neither of them should be of any social concern. On the other hand, it is clear that every society has a right to protect itself against sexual acts that involve force or violence, or which take place in front of unwilling witnesses. Such acts may be satisfying to the person who commits them, but since they obviously violate fundamental rights of others, they are socially unacceptable. Traditionally, they have always been treated as serious crimes which deserved severe punishment. However, in modern times there has been growing tendency to view such acts as symptoms of mental illness rather than crimes. Psychiatrists began to argue in court that certain sexual offenders should not be sent to prison but to a mental hospital, and that they should not be punished but cured of their illnesses...

Nevertheless, it cannot be denied that some people develop behavior patterns which are unacceptable even to themselves. For example, a man may realize that his sexual acts are harmful to others, but he may have great difficulty controlling himself. In another case, such compulsive behavior may not be antisocial, but since it creates a sense of helplessness in the individual, he may still find it highly disturbing, such as masturbation. There are also men and women who feel guilty and apprehensive about any kind of sexual activity, and some others are so self-conscious and inhibited that their sexual responses are inadequate.

It is fair to say that all of these people are sexually maladjusted. In other words, their particular learning experiences have rendered them incapable of full sexual communication. They either have become insensitive to the needs of others, or are unable to fulfill them. They cannot relate to their sexual partners as complete persons, or adapt their own desires to different circumstances and situations. They seem condemned to repeat the same frustrating and self-defeating acts, in short, they fail to achieve the full amount of physical and emotional satisfaction of which most human beings are capable.

There is now a greater awareness than ever before that men and women are capable of learning, unlearning, and relearning many sexual attitudes and reactions throughout their lives. "Nevertheless, the importance of **sexual conditioning in infancy and childhood** remains well recognized". There is also no doubt that parents and close relatives have a great influence on a child's sexual



development. The discipline they demand, the routines they establish and the examples they set give boys and girls the first concept of sexual differences and teach them how to relate to their own bodies. Adults convey their sexual attitudes to children in a thousand different ways; through their sense of modesty and privacy, the way they answer questions about sex, the words they use for sexual organs and sexual activity, their tone of voice, their gestures and facial expressions while reacting.

All babies are born with a certain physical equipment which enables them to respond to sexual stimulation. They feel pleasure when their sex organs or other erogenous zones are touched, and they may even reach orgasm fairly early in life. Nevertheless, infants are still "sexually inarticulate". They respond rather indiscriminately to all kinds of stimuli, and their responses are not yet fully integrated and coordinated as we mentioned before. Only gradually, and under the influence of **social conditioning**, do children begin to structure their sexual behavior in a way that is acceptable to the culture in which they grow up. In other words, they not only learn the "**proper**" responses, but also suppress and forget the "**improper**" ones. In fact, when they try later to increase their sexual responsiveness through treatment, they may spend a great deal of time and energy relearning the very responses they were once taught to suppress.

For infants, the main source of sensual stimulation is the mother. As they are being touched, caressed, and nursed, they learn to feel loved and accepted and to gain confidence in the world. Physical closeness gives them the sense of security they need for a healthy development. It is therefore very unfortunate that some hospitals still separate newborn infants from their mothers, thus depriving both of the first essential communication. Later, this initial mistake may be compounded by the mothers themselves when they avoid any skin contact with their infants and keep them clothed even while playing with them. By the same token, a mother who does not **breast feed** her baby misses an important opportunity to build a more intimate relationship. Babies want more than just nourishment, they also hunger for human warmth and reassurance. Some working mothers realize their children's needs in this respect, but refuse to meet their natural demands and stop lactation after a rather short time because of many excuses unfortunately. However, just as infants cannot learn to speak unless they are spoken to, they cannot learn to show love and affection unless they are hugged, stroked, tickled, and kissed by their parents or nurses. Parents who deny their children such **physical and emotional gratification** leave them frustrated, and in fact teach them to feel uncomfortable with their bodies. There is no doubt that such **negative early experiences** can deeply affect the child's future attitude toward sex.

Once we realize how social conditioning influences our development as males and females, we have taken then the first step toward understanding the development of our sexual behavior. Moreover, we can now make another useful distinction, "**sexual orientation**" broadly indicate an erotic preference for male or female partners. However, most people know that erotic preferences are

usually much more specific. For example a "typical male" is by no means attracted to all females, but only to those of a certain age, height, weight, hair color, etc.. In fact, he may prefer not only a special type of female, but also a special type of sexual intercourse under special conditions. These particular preferences and tastes within the general framework of a person's sexual orientation are best described as personal "**sexual interests**". They too are the result of conditioning.

## **Patterns of Sexual Behavior**

Two pieces of recent work on the subject of sexual development have shown that these problems of early conditioning are shared not only by all races but even by animals as well. One is by Ford and Beach, "**Patterns of Sexual Behavior**", the research was done by an anthropologist and psychiatrist, on the sexual behavior of a number of mammalian species and of 190 human societies as well. Strangely enough, it was discovered that there is almost nothing in the way of present day so called perversion, which is not practiced sometimes by other races or by other species of animal. These facts are bound to influence our future evaluations and perhaps ultimately even our considerations; for obviously sexual acts which are part of the biological heritage of man can hardly be regarded as intrinsically unnatural or abnormal. In some societies of the past, including American Indian tribes, certain males were allowed or even encouraged to adopt a feminine gender role and live as "**shamans**", "**alyhas**" or "**berdaches**". They wore female clothes, married some great warrior or other important man in the community, and took care of his household. Very often they also enjoyed great prestige themselves because they were believed to possess magical powers!. Obviously, this social arrangement at that time provided a convenient outlet not only for those transsexuals, but also for the other sexual minorities, such as hermaphrodites, transvestites, and effeminate homosexuals. More virile homosexuals, on the other hand, could find sexual fulfillment within their false masculine role by marrying a "berdache".

We know of various primitive societies, such as the "**Siwanṣ**" in Africa, the "**Aranda**" in Australia, and the "**Keraki**" in New Guinea, where nearly all males engage in both heterosexual and homosexual intercourse. In ancient Greece, homosexual behavior was widely accepted as a normal part of a man's sexual activity, and it was never considered an obstacle to his future marriage or fatherhood. At that time, the very word, "homosexuality" was unknown to them, instead, people spoke of "**paidierastia**" (literally love of boys from pais: boy, or rather here male adolescent, and eran: to love) which was cultivated as a socially healthy custom. However, neither the older lover (called "**the inspirer**") nor the younger beloved (called "**the listener**") was ever assumed to be incapable of normal relationships with women. Nowadays, the terminology has changed, the active male homosexual performing anal penetration during sodomy is called the "**inserter**" while the passive male homosexual is termed the "**receiver**". Historical and cross-cultural studies about some ancient Greek city states have shown that male homosexuality was associated not with weakness and

effeminacy, but with virility, bravery, and heroism. As a matter of fact, the most famous of all Greek military elite troops, called the "sacred band" of Thebes, which was finally defeated by Philip of Macedonia, is said to have consisted entirely of male lovers... This example shows that the social stereotype of the "homosexual" may vary considerably from one time and place to another; it also demonstrates once again that there is no such thing as a "typical" homosexual.

The second research project was the recording by cinema of some work done by psychiatrists in Chicago upon chimpanzees. This piece of work have shown that in animals observed, sexual urges were distorted or obliterated by the persistent operation of fear and hunger. It was decided to upset the animals by letting hunger force them into a seemingly dangerous situation. Some male chimpanzees had been "**conditioned**" to ring for their food in one cage and receive it in another. They were photographed when for the first time a toy snake was pushed into the feeding cage as they ate. "**Fear**", repeatedly caused them to run away, and relatively they came to prefer serious degrees of "**hunger**" to the risk of seeing the snake.

During the weeks of these experiments other aspects of the animal's "**instinctive behavior**" became markedly altered. Chimpanzees who had formerly led normal sexual lives turned away from their usual habits; they became engrossed in masturbatory activities, disregarded the wooing of the females, and homosexual interests became more acceptable than the normal ones... In other words, their "**character**" too, was changed, wild chimpanzees became docile, clinging to their keepers, and when finally they were induced back to their feeding cages, the presence and reassurance of their keepers was essential before the ordeal was endurable to them. In other words, "**neurotic traits** ", had developed similar to those which only too commonly arise from severe stress in human beings at times of difficulty and excessive strain.



## Endocrine Aspects of Sexual Behavior

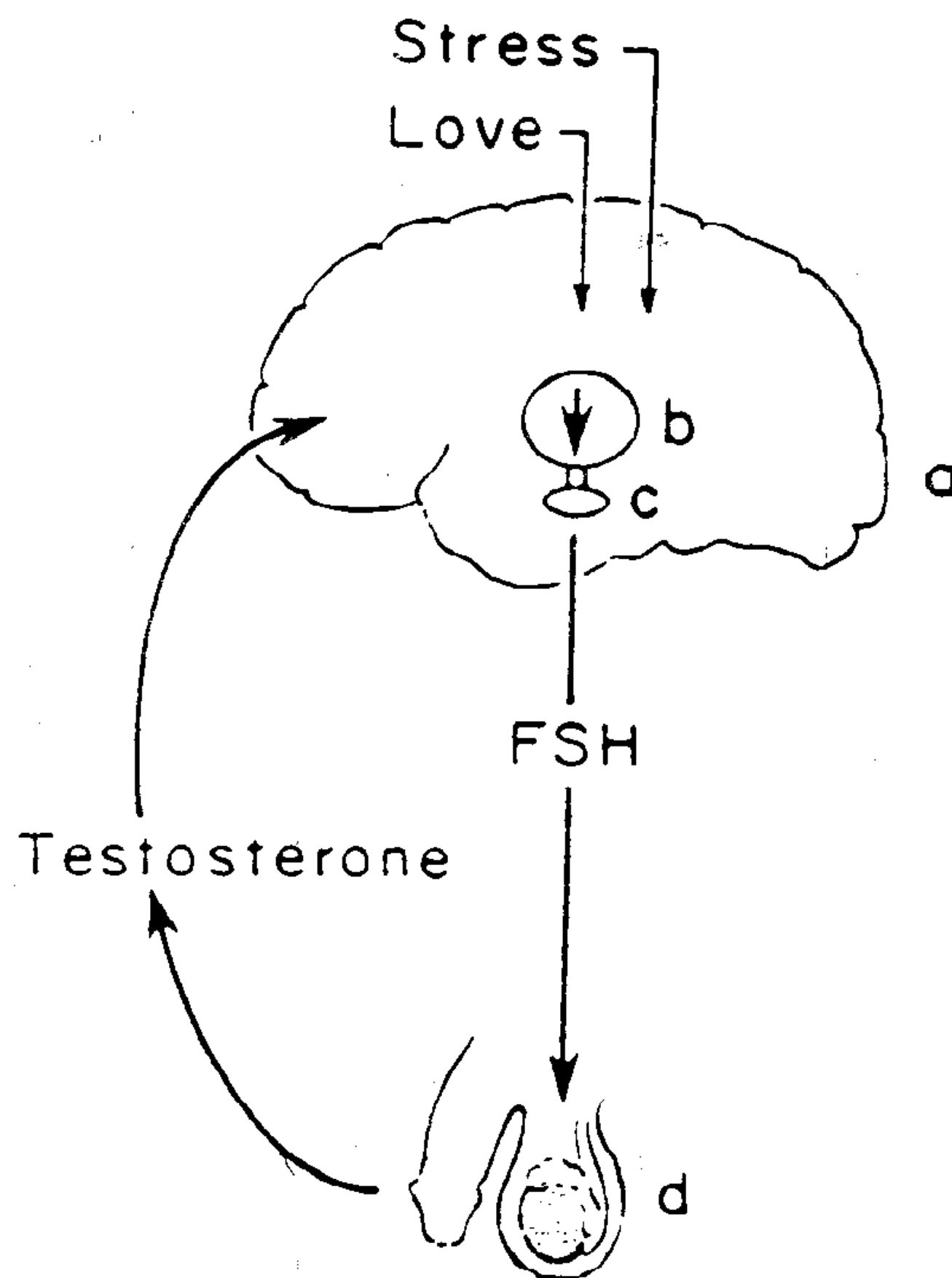
The importance of hormonal influences on reproduction and sexual behavior has been recognized since the early part of this century. Although it was initially thought that the pituitary gland was the primary focus of control over those processes, it is now known that the brain itself acts as the major regulator, with the hormones that are secreted in the hypothalamus controlling the functions of the pituitary. The brain is also a target for the sex steroid hormones manufactured in the gonads. For example, these hormones act on sexual differentiation of the brain during fetal life, initiate puberty, and play a role in the regulation of sexual behavior.

### Testosterone

In a normal adult male, testosterone is produced primarily by the testes, with less than 5 percent normally contributed by the adrenal cortex. The average testosterone production rate for adult men is 6 to 8 mg per day. There is a diurnal variation in circulating levels of testosterone, with peak concentrations measured in the morning hours, (prior to 10.00 A.M.). Measurement of urinary testosterone levels has now been discarded by most researchers, and clinicians are in favor of direct measurement of circulating hormone by radioimmunoassay techniques. Typical values for circulating testosterone concentration (ng/dl) are: 385-1,000 in adult males, 20-28 in prepubertal children, 120-600 in pubertal boys, 100-300 in hypogonadal adult males, 20-80 in adult females, 45-125 in females using oral contraceptives (Fig. 1).

Testosterone appears to be the major biologic determinant of the sex drive in both sexes, it is the "**libido**" hormone for both sexes. Marked testosterone deficiencies in the male are usually accompanied by depressed libido and impotence, which improve with restoration of normal hormone levels. In addition, since the prostate and seminal vesicles are androgen-dependent, seminal fluid volume is diminished when a severe testosterone deficiency is present. Most men with impotence have normal levels of testosterone, reflecting the fact that many instances of sexual dysfunction are of psychogenic rather than biologic origin.

The precise relationship between hormones and sexual behavior is not clearly understood at present. In a variety of nonprimate animal species, plasma testosterone concentrations increase after coitus or ejaculation. In monkeys, however, although access of adult males to receptive females reportedly leads to increased circulating testosterone, neither testosterone nor **luteinizing hormone** increases significantly after coitus or ejaculation. Conflicting results have been reported in regard to humans. Although some studies indicate that testosterone levels do not increase after coitus or masturbation, still other reports fail to document a positive correlation between either sexual activity or sexual interest and serum testosterone levels. There are studies indicating increased testosterone after masturbation, during and after coitus, and in response to viewing erotic movies.



**Figure 1. Testosterone and the brain**

Schematic representation of the reciprocal influences between testosterone and the brain. (a) is the cortex which responds to life experiences. (b) represents the hypothalamus which is intimately connected to (c) the pituitary gland which secretes follicle-stimulating hormone (FSH). This hormone regulates testosterone production by the male testes (d), and in turn, the level of testosterone profoundly affects cerebral functioning and behavior.

Persky and his colleagues have recently suggested interrelationships between hormone levels and the sexual behavior of couples; in addition, evidence indicating that there may be a seasonal cycle of plasma testosterone in men, further compounds the methodological difficulties in investigations of this type. Endocrine regulation in women is somewhat more complex than in men, since women undergo a series of cyclic hormone changes from the onset of menstruation until the time of menopause.

## **Ovulation**

Mechanisms of female sexual behavior in animals have been reviewed in detail in two recent surveys. In humans, some evidence indicates that female sexual receptivity and initiatory behavior may be greatest around the time of ovulation. Persky and co-workers found a greater frequency of sexual activity throughout the menstrual cycle in women whose periovulatory testosterone levels reached higher peaks than in a group of women with lower peak periovulatory

testosterone levels. They also reported that women showed a greater degree of sexual responsiveness and a greater need for affection and love around the time of ovulation. These findings must be interpreted cautiously since only a few number of women were studied and blood samples were obtained only twice per week. **Adams, Gold, and Burt** reported a rise in female initiated sexual activity at the time of presumed ovulation and found that this behavioral pattern was not present in women using oral contraceptives. On the other hand, a number of other studies failed to document a midcycle peak in female sexual behavior or arousal. Resolution of these differences must await carefully designed studies that will integrate sequential endocrine data with precise sexual behavioral measures.

## Olfaction

An additional factor in the relationship between human sexual behavior and neuroendocrine changes is olfaction. It is uncertain how important olfaction may be as an occasional mechanism of sexual arousal. In a wide variety of animal species, sex-attractant chemical substances, "**pheromones**", serve as a means of communication between members of the same species have been identified. The possible finding of similar chemical substances in human females has permitted some speculation about the role that pheromones may play in human sexuality.

Human neurophysiological investigations have shown that there is a close anatomic relationship between olfactory and sexual functioning. The power of olfactory impulses for sexual arousal in lower animals has long been established on a clear anatomical basis. Infrahuman mammals secrete odoriferous substances which stimulate and release sexual responses in the opposite sex. In human beings, the potent and unrecognised influence of smell on sexual functioning was not often fully appreciated. However, recently it has been recognised that humans also secrete pheromones. Humans therefore have the power of being turned "On" and "Off", by genital odors of the opposite sex. **Beiber** and co-workers stated that, there is no doubt that a tantalizing aroma is a powerful aphrodisiac e.g. perfumes, while an unpleasant odor emanating from a sexual partner may be a powerful inhibitor to the enjoyment of sex. They found similar substances "pheromones" in human vaginal secretions permitting the possible role that pheromones may play in human sexuality. Again, **Kaplan, et al.**, explained the abnormal sexual acts of cunnilingus and fellatio, because, although olfaction may be an important stimulus in certain aspects of normal sexual behavior; in other situations, involving abnormal olfactory acuity are frequently met with in certain aspects of perversion involving males and females. Such is the case in the queer sex position of "69" where both partners perform fellatio and cunnilingus at the same time ... Our understanding of the recent physiologic control mechanisms related to neuroendocrinology and reproductive behavior is advancing rapidly. New data about the role of peptides in brain and endocrine function and better delineation of neuroregulatory substances such as **endorphins**, **dopamine**, and **serotonin** promise to bring about further progress in understanding human sexuality.



## **Luteinizing hormone-releasing factor**

Recent evidence indicates that (LH-RF), the small peptide molecule of the **luteinizing hormone - releasing factor**, may enhance sexual desire even in the absence of testosterone or when testosterone is ineffective. This finding has raised interesting questions, such as: Does LH-RF act directly on the sex centers of the brain ? Can it be used clinically to increase libido ? As yet, LH-RF is a mystery, but it has important implications and merits further investigation. Evidence suggests that **serotonin**, or 5-HT (hydroxy-tryptamine) acts as an inhibitor, and **dopamine** as a stimulant to the sexual centers of the brain.

## **Bonding**

The connection to an attractive and receptive male, stimulates the sexual centers in all animals which reproduce by sexual union, including humans. Female rabbits ovulate and become sexually receptive in the presence of an attractive male. And when we are in love, libido is high, every contact is sensuous and exciting, thoughts turn to **Eros i.e. love**, and the sexual reflexes work rapidly and very well. The presence of the beloved is an aphrodisiac; the smell, sight, sound, and touch of the lover - especially when he or she is excited - are powerful stimuli to sexual desire. In physiologic terms, this may exert a direct physical effect on the neurophysiologic system in the brain which regulates sexual desire. But again, we must not forget, that there is no sexual stimulant so powerful, even love, that it cannot be inhibited by fear and pain.

## **Galactorrhea**

An interesting phenomenon that is not generally known is the fact that some women have brief episodes of galactorrhea shortly after performing vigorous sexual activity typically when orgasm has occurred. This may be due to elevations in circulating prolactin that occur as a result of breast manipulations and that is associated with orgasm. This type of galactorrhea is physiological and unlikely to be a reflection of underlying pathology, although if it changes from a transient to a more persistent pattern or is associated with other symptoms that might be indicative of intracranial tumour (e.g. headaches, visual changes, alterations in the sense of smell), diagnostic studies would be warranted. Galactorrhea, apart from a wide variety of causes, may be more evident during or immediately after sexual activity in some women. It is unfortunate that normal physiological galactorrhea is treated wrongly by some doctors and they give these physiologically normal women bromocryptine in the form of Parlodel and other medications e.g. Dopergin on the assumption that it is pathological ...

# 3

## **MALE AND FEMALE SEXUAL ANATOMY**

- **I. Male sexual anatomy.**
- **II. Female sexual anatomy.**
- **III. Anatomy of the sexual nervous system.**

# MALE AND FEMALE SEXUAL ANATOMY

## I. Male Sexual Anatomy

### Penis

The penis consists of three cylindrical bodies of erectile tissue, the paired corpora cavernosa lie parallel to each other and just above the corpus spongiosum, which contains the urethra. The erectile tissues consist of irregular sponge like networks of vascular spaces interspersed between arteries and veins. The distal portion of the corpus spongiosum expands to form the glans penis. Each cylindrical body is covered by a fibrous coat or tissue, the tunica albuginea, and all three corpora are enclosed in a covering of dense fascia. At the base of the penis the corpora cavernosa diverge to form the crura, which attach firmly to the pubis and ischium (the pubic arch). The blood supply to the penis derives from terminal branches of the internal pudendal arteries (Figs. 2 - 4).

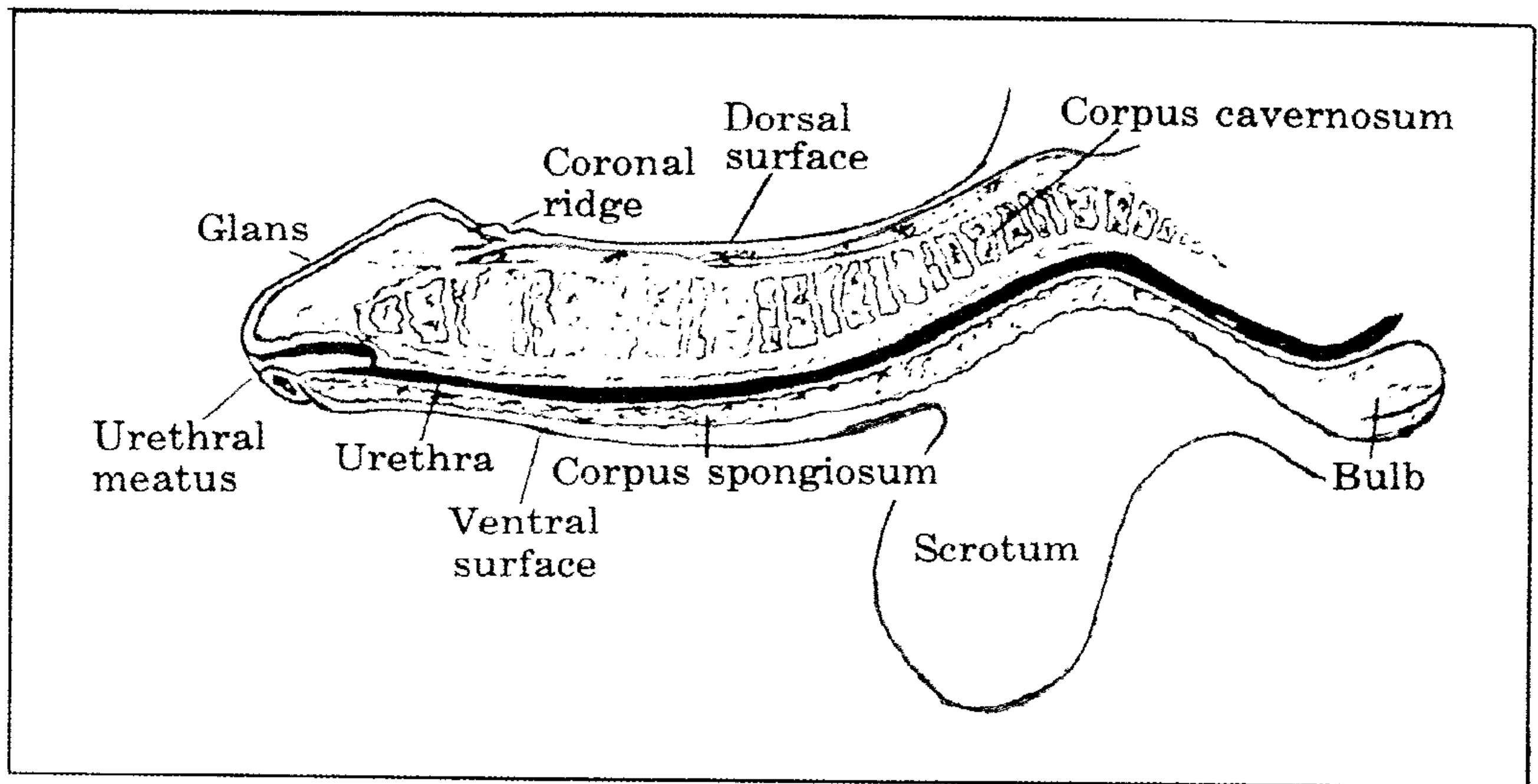


Figure 2. The penis: (lateral view).

### Mechanism of erection

Erection is attained and maintained by a complex physiologic system, which produces an increased flow of blood to the penis while at the same time decreasing the flow of blood out of the erect organ. This increases the amount of blood and traps it inside the penis at a relatively high pressure. The increased amount of blood is shunted into the cavernous sinuses which distend, thus enlarging the penis. The enlargement is contained by the tough fascia which encases the penile cylinder, the pressure of the increased blood against this sheath hardens the penis and makes it erect. The increased penile flow of blood during



excitement is known to be caused by the dilatation of the penile arteries, this is brought about by parasympathetic impulses from the erection centers, which cause the muscles in the arterial walls to relax. The mechanism responsible for decreasing penile outflow is caused by reflex constriction of the penile veins. An alternate hypothesis suggests that special penile valves control the outflow, while still another hypothesis postulates that the outflow and also the shunting of blood to the cavernous sinuses are controlled by "polsters", which are small smooth muscle structures located only on the penile blood vessel walls which hinder the venous outflow.

The erectile response is primarily a **parasympathetic**, although surgical and pharmacological evidence suggests that some sympathetic component is also required for potency, possibly by controlling the outflow of erectile blood. However, it is well-known clinically that an intense sympathetic response such as that produced by fear and anxiety, can instantly drain the penis of extra blood and so cause a psychogenic loss of erection.

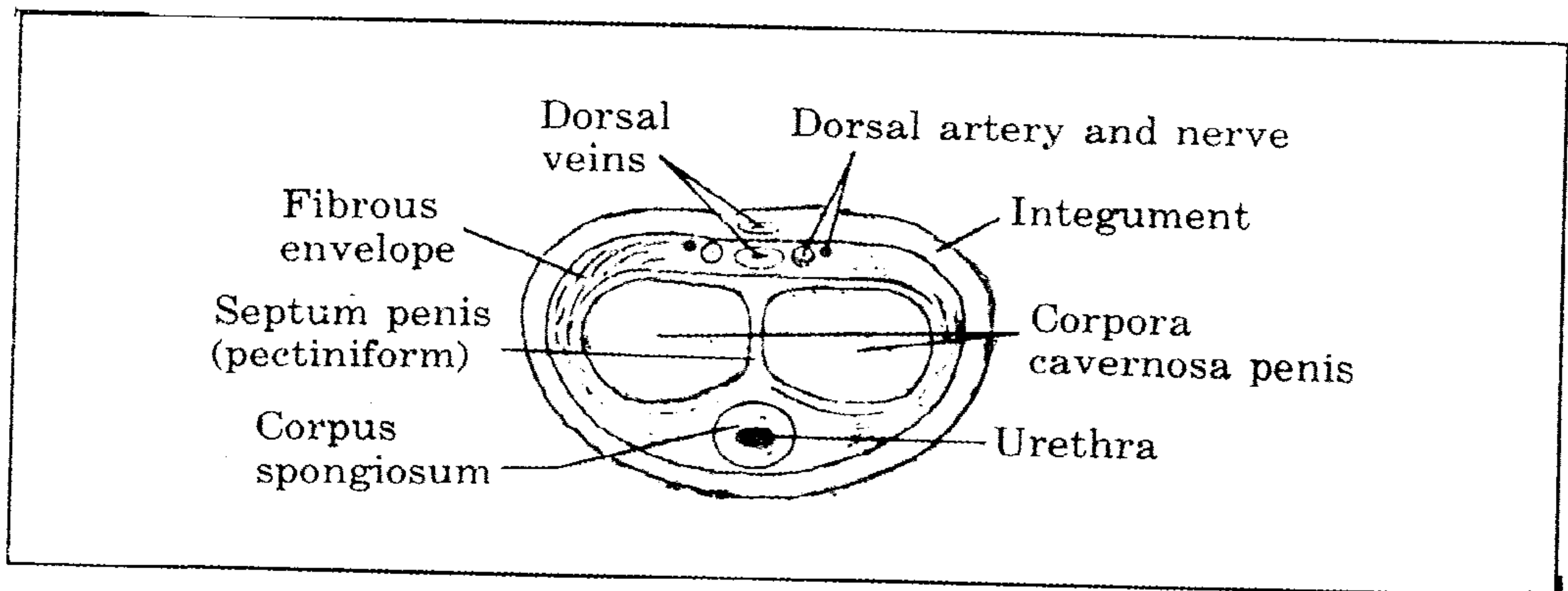


Figure 3. The penis: normal anatomy (transverse section).

The vascular events that produce erection are under the control of neural impulses. Although it has been speculated that parasympathetic fibres in sacral cord roots ( $S_2$ ,  $S_3$ , and  $S_4$ ) mediate erection, this theory was a matter of some controversy but is well established now. The skin that covers the penis is freely movable and forms the foreskin or prepuce at the glans. Inflammation or infection of the foreskin or glans may cause pain during sexual activity. There is much controversy and little data surrounding the question of the effect of circumcision on male sexual function. There is also a great deal of confusion as regards to penis size and sexual function. With rare exceptions due to conditions of a true microphallus, the marked variation in the size of the flaccid penis from man to man is less apparent in the erect state, because a greater percentage volume increase typically occurs during erection in the smaller penis than in a larger one (Fig.4).

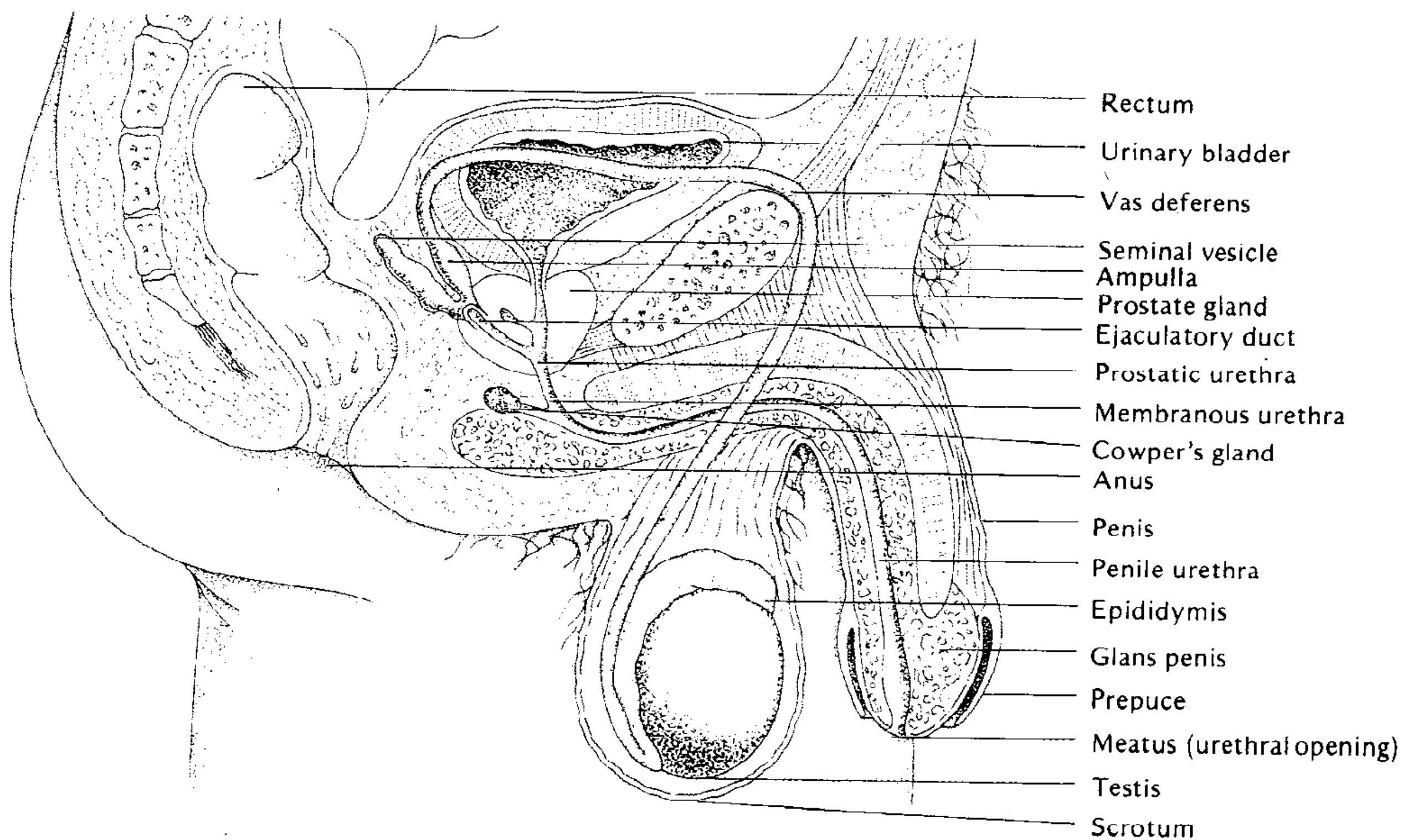


Figure 4. External and internal sex organs of the male (side view).

### Scrotum

The scrotum is a thin sac of skin containing the testicles. Involuntary muscle fibres are an integral part of the scrotal skin; these muscle fibres contract as a result of exercise or exposure to cold, causing the testes to be drawn upward against the perineum. In hot weather, the scrotum relaxes and allows the testes to hang more freely away from the body. These alterations in the scrotum position are important thermo-regulators. Since spermatogenesis is temperature sensitive, elevation of the testes in response to cold provides a warmer environment by virtue of body heat, whereas loosening of the scrotum permits the testes to move away from the body and provides a larger skin surface for the dissipation of intrascrotal heat. The scrotum is divided into two compartments by a septum.

### Testes

Although the testes differentiate embryologically as intra-abdominal organs, they ordinarily descend to their scrotal position prior to birth. The testes function as the site of spermatogenesis and also play an important role in the production of sex steroid hormones. Spermatozoa are produced in the seminiferous tubules of the testes, while steroid hormone production occurs in the

Leydig cells located in the interstitial tissue. Although architecturally these tissues are admixed within the testis, the two functions are under separate control from the pituitary gland. Hormone synthesis may proceed in a completely normal fashion even if the seminiferous tubules are dysfunctional, but spermatogenesis is generally disrupted if testosterone synthesis is seriously impaired.

## **Prostate**

The prostate gland, which is normally about the size of a chestnut, consists of a fibrous muscular portion and a glandular portion. The prostate is located directly below the bladder and surrounds the urethra as it exits from the urinary bladder. The rectum is directly behind the prostate, permitting palpation of this gland by rectal examination. The prostate produces clear alkaline fluid that constitutes portion of the seminal fluid, the prostate is also a major site of synthesis of chemical substances, known as prostaglandins, which have a wide variety of metabolic roles. Prostatic size and function are largely androgen-dependent. Cancer of the prostate arises in the glandular portion, whereas benign prostatic hypertrophy usually results from enlargement of the fibromuscular component of the prostate.

## **Seminal vesicles**

The seminal vesicles are paired structures that lie against the posterior aspect of the base of the bladder and join with the end of the vasa deferentia (which are the tube like structures that carry the spermatozoa from the testes) to form the ejaculatory ducts. The ejaculatory ducts open into the prostatic urethra; the major fluid volume of the ejaculate derives from the seminal vesicles. Cowper's glands, which may produce a pre-ejaculatory mucoid secretion, are otherwise of unknown function.



## II. Female Sexual Anatomy

### ( A ) The external genitals of the female

They consist of the labia majora, the labia minora, the clitoris, and the perineum. The Bartholin's glands, which open on the inner surfaces of the labia minora, may be considered functionally within the context of the external female genitals, although their anatomic position is not in fact external. (Fig. 5).

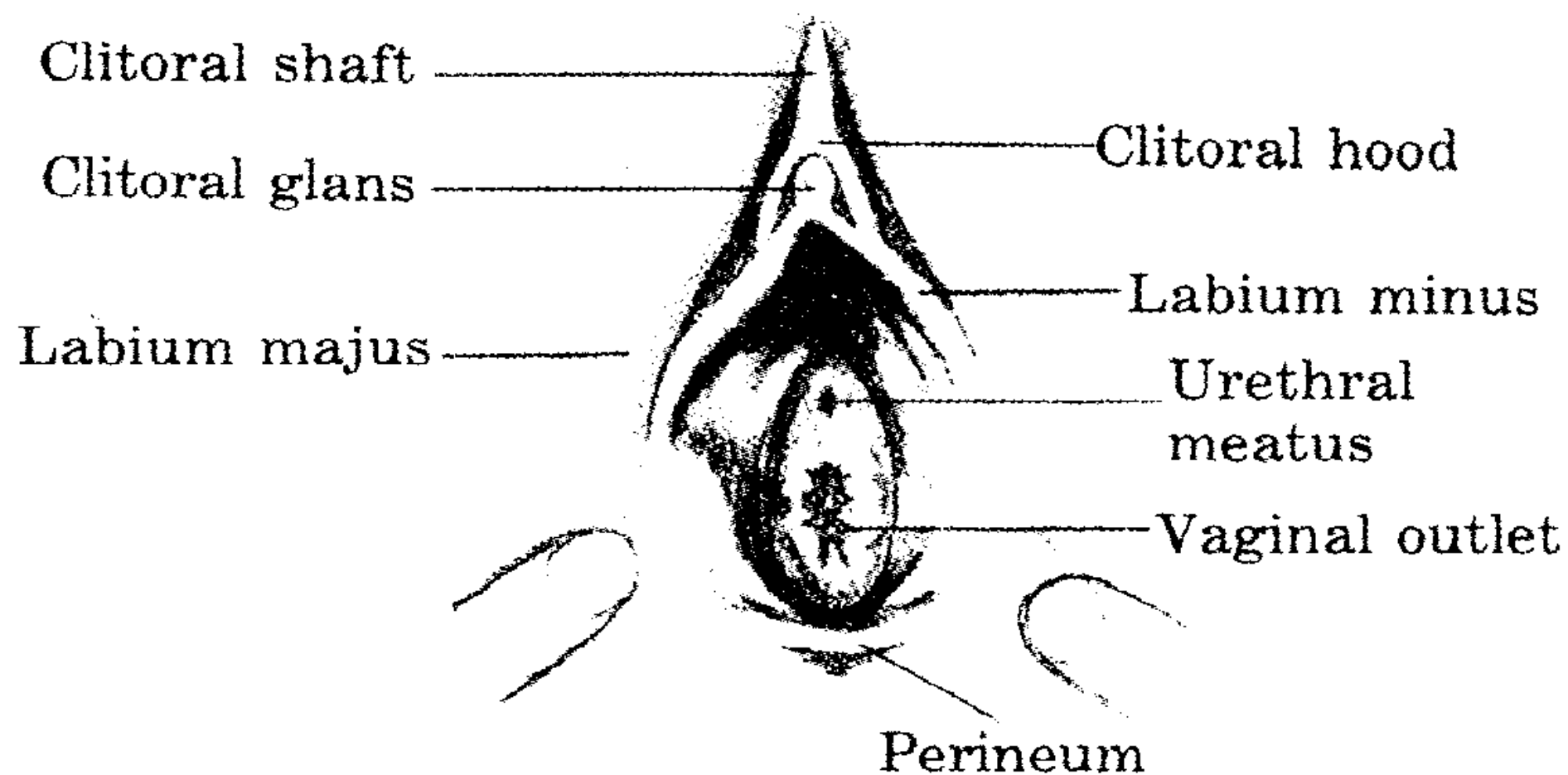


Figure 5. Virgin female external genitalia (spread manually).

#### Labia majora

The appearance of the genitals varies considerably from one female to another, including: (1) Marked variation in the amount and pattern of distribution of pubic hair; (2) Variation in size, pigmentation, and shape of the labia; (3) Variation in size and visibility of the clitoris; and (4) Variation in the location of the urethral meatus and the vaginal outlet. In the sexually unstimulated state, the labia majora usually meet in the midline, providing mechanical protection for the opening of the urethra and the vagina.

Histologically, the labia majora are folds of skin composed of a large amount of fat tissue and a thin layer of smooth muscle, (similar to the muscle fibers present in the male scrotum). Pubic hair grows on the lateral surfaces, both the medial and lateral surfaces have many sweat and sebaceous glands.

#### Labia minora

The labia minora have a core of vascular, spongy connective tissue without fat cells; their surfaces are composed of stratified squamous epithelium with large sebaceous glands. Its very essential role as one of the three primary erogenous

zones in females will be discussed fully in the chapter of the sexually stimulated female.

## **Clitoris**

The clitoris, which is located at the point where the labia majora meet anteriorly, is made up of two small erectile cavernous bodies enclosed in a fibrous membrane surface and ending in a glans or head. Histologically, the tissue of the clitoris is very similar to that of the penis. The clitoris is richly endowed with free nerve endings in contrast with vagina, where they are extremely sparse within the interior of vagina. These free nerve endings are not known to have any function other than serving as a receptor and transducer for erotic sensations in the human female. The very important role that the clitoris plays during sexual excitement will be discussed fully in the chapter of the physiology of coitus in the female; while the loss of the clitoris and the labia minora due to the drastic and tragic operation of female circumcision will be strongly criticized in the chapter of female circumcision.

## **( B ) The internal genitals of the female**

They include the vagina, cervix, uterus, fallopian tubes, and ovaries. These structures may show considerable variation in size, spatial relationship, and appearance as a result of individual differences as well as reproductive history, age and presence or absence of disease.

## **Vagina**

The vagina exists functionally more as a potential space than as a balloon-like opening. In the sexually unstimulated state, the walls of the vagina are dry collapsed together. The vaginal introitus is surrounded by an exterior muscle, the bulbocavernosus which acts as a sphincter for the vagina. The introitus is highly reactive to both pain and pleasure. At a slightly deeper muscular level, the introitus and outer third of the vagina is surrounded by the muscular ring of the pubococcygeus.

The walls of the vagina are completely lined with a mucosal surface that is now known to be the major source of vaginal lubrication; there are no secretory glands within the vaginal walls, although there is a rich vascular capillary bed. The vagina is actually a muscular organ, capable of contraction and expansion, it can accommodate to the passage of a baby and can adjust in size to accept a much smaller object.

## **Hymen**

The entrance to the vagina is partially obstructed by a thin and delicate membrane called hymen (Fig. 6), it has perforations in it that allow menses to be eliminated monthly. Although the hymen appears to have no biological function,

yet it has tremendous cultural significance as well as it appears in different shapes and types in its various pictures. In a majority of cultures as well as ours an intact hymen or "maidenhead" has been an important indicator of virginity, although very rarely some females may be born without a hymen, and indeed some women only lose their hymen after they give birth to a child because their hymen is very stretchable and allows gentle penile penetration without being torn. The act of "defloration" which is the removal of the hymen is associated with considerable cultural ceremonies in the past and present. In old Australian tribes and other old cultures defloration was performed by older women who tear the hymen one week prior marriage using animal horns ! or stone penises ! termed "plucking of the maidenhead". In some parts of upper Egypt and the Sudan, defloration is still being carried out by the "Daya" while marriage festivities do not start till a piece of gauze soaked with blood from the torn hymen is publicly shown to the relatives of the future husband... (Figure 6)

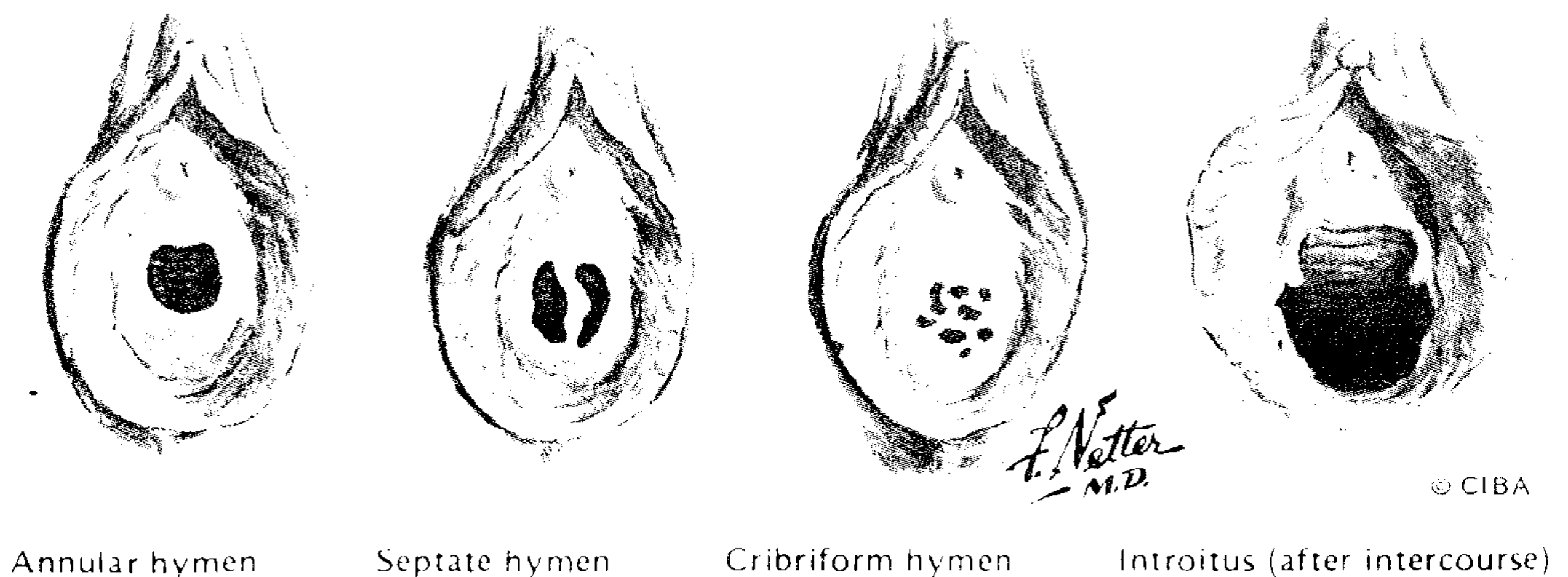


Figure 6. The appearance of the hymen varies considerably from individual to individual. In some cases, it encircles the entire rim of the vagina (annular), and in others it may have several smaller openings (septate and cribriform). In the sexually experienced woman, the introitus appears larger, although remnants of hymen tissue are still present.

## Cervix

The cervix is the part of the uterus that protrudes into the vagina, while the cervical os provides a point of entry for the spermatozoa into the upper female genital tract and also serves as an exiting point for the menstrual flow. The endocervical canal contains numerous secretory crypts like glands that produces mucus. The consistency of cervical secretions varies during various phases of hormonal stimulation throughout the menstrual cycle. Just prior to or at the time of ovulation, cervical secretions become thin and watery; at other times of the cycle, these secretions are thick and viscous, forming a mucus plug that blocks the cervical os.



## **Uterus**

The uterus is a muscular organ that is situated in close proximity to the vagina, the two linings of the uterus, namely the endometrium and the myometrium function quite separately. The myometrium is important in the onset and completion of labor and delivery, with hormonal factors thought to be the primary regulatory mechanism. The endometrium changes in structure and function depending on the hormonal environment. Under the stimulus of increasing estrogenic activity, the endometrium thickens and becomes more vascular in preparation for the possible implantation of a fertilized egg. If the fertilized ovum implants, the endometrium participates in the formation of the placenta. When fertilization and implantation do not occur, the greatly thickened endometrium begins to break down, resulting in the menstrual flow as a means of shedding the previously proliferated endometrial tissue, which will regenerate under appropriate hormonal stimulus in the next menstrual cycle. Endometrial biopsy may be undertaken as part of an infertility evaluation to determine if ovulation has occurred and to observe whether appropriate progesterone secretion has been present.

## **Fallopian tubes**

The fallopian tubes or oviducts originate at the uterus and open near the ovaries, terminating in finger-like extensions called fimbriae. The fallopian tube is the usual site of fertilization; the motion of cilia within the tube combined with peristalsis in the muscular wall results in transport of the fertilized ovum to the uterine cavity.

## **Ovaries**

The ovaries are paired abdominal structures that periodically release eggs during the reproductive years and also produce a variety of steroid hormones. These two small oval bodies (4 cms x 3 cms) are located in the lower abdomen, held in place by the ovarian ligaments which are attached to the uterus. The female sex hormones which are produced (oestrogen and progesterone) play a role in the sexual behavior of females.

## **Bartholin's glands**

A pair of glands located just inside the inner lips (labia minora) on either side of the vaginal entrance. A small amount of fluid is produced by these glands only after a woman is thoroughly aroused sexually and the act of intercourse has been particularly prolonged ...

## **Embryology**

The external genitalia of both sexes are developed from the same genital tubercle embryologically at around the sixth week of gestation. The genital tubercle eventually differentiates into a clitoris in the female and a penis in the

male. This point of embryological development is of medical interest sexologically denoting the importance of the external female genitalia in the physiological responses of the sexually stimulated female as well as the dramatic loss of these vital organs through the serious operation of female circumcision (Fig. 7).

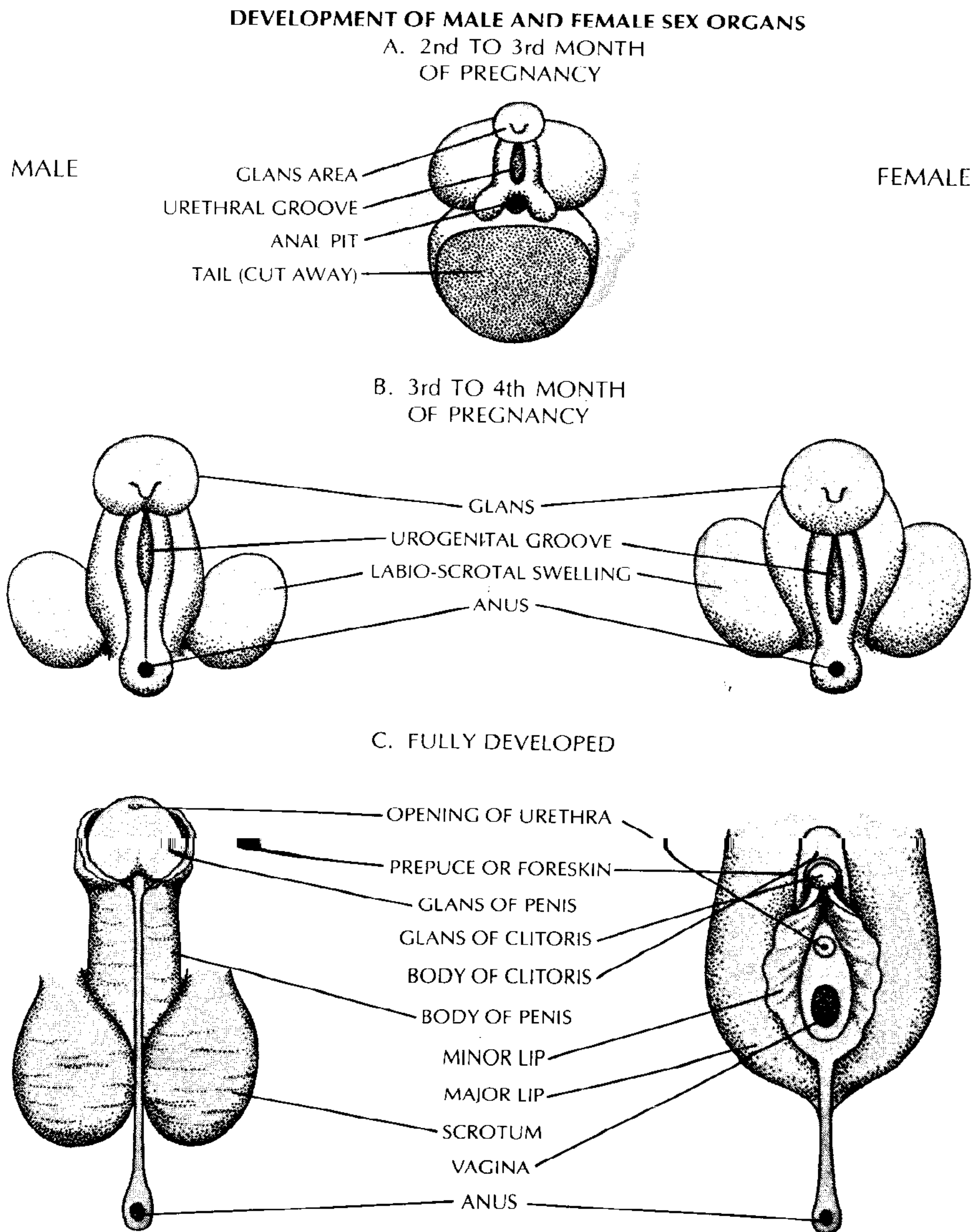


Figure 7. Development of external sex organs in both males and females to show the similarity early in life.

### III. Anatomy of the Sexual Nervous System

The anatomy of the sexual nervous system is fairly well understood; the sex center of the brain consists of a network of neural centers and circuits both inhibitory and activating, and have been well identified. They are known to be located within the limbic system, with important nuclei in the **hypothalamus** and in the **preoptic region**. The limbic system is located in the limbus or rim of the brain, it is an archaic system which governs and organizes the behavior that ensures not only individual survival but also the reproduction of the species. Towards those ends it contains the neural apparatus that generates and regulates emotion and motivation. The limbic system exists even in primitive vertebrates and has remained essentially unchanged even in man. However, it has been integrated into our complex brains so that it often seems to have disappeared, yet it is very much alive and influential and comprises the biological substrate of our complex emotional and sexual experience (Fig. 8).

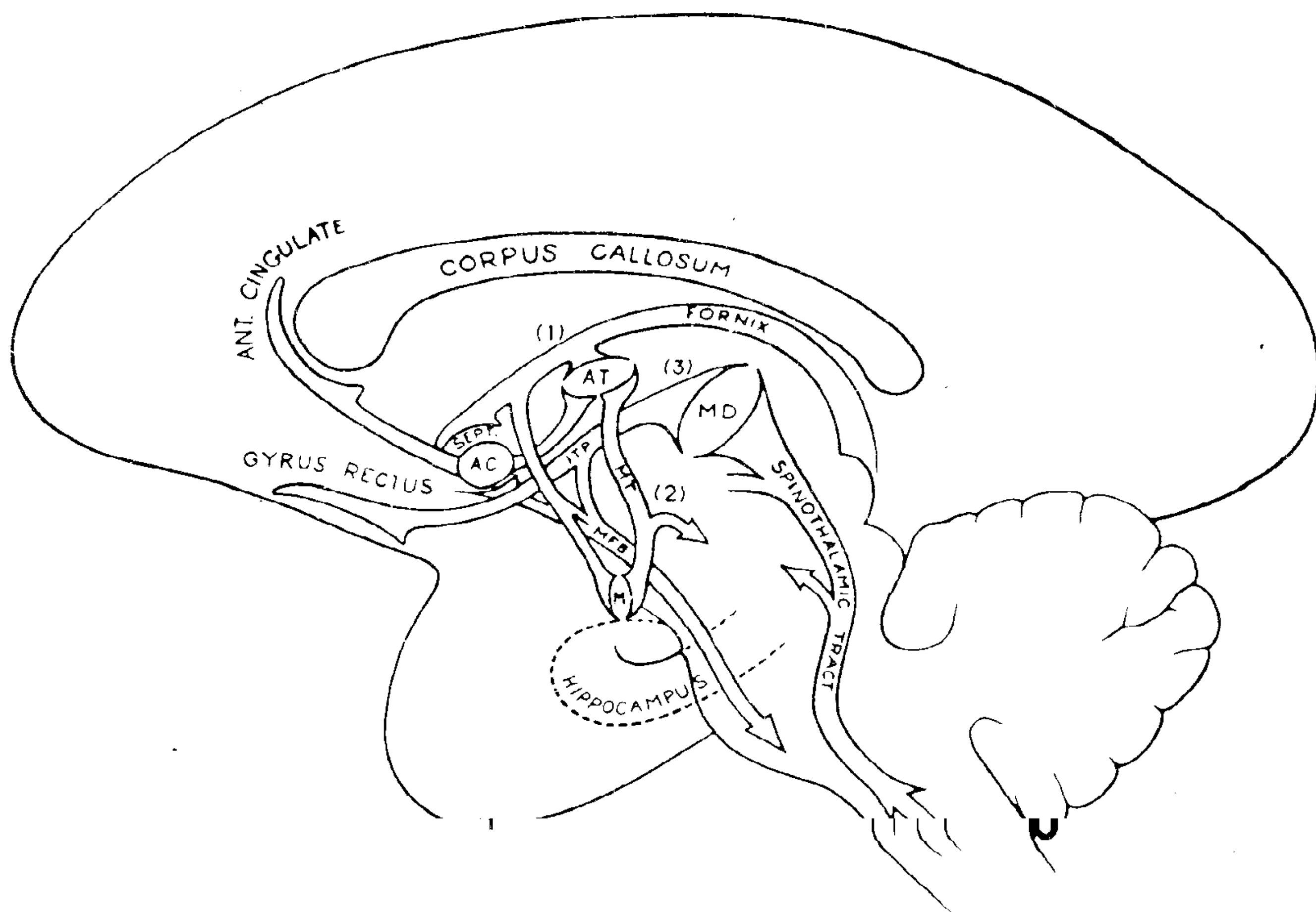


Figure 8. Cerebral localization of erection.

Positive loci for penile erection are found in parts of three corticosubcortical subdivisions of the limbic system that are schematically depicted in above drawing and labeled 1,2 and 3. The septum (SEPT) and medial part of medial dorsal nucleus (MD) are nodal points with respect to erection. The medial forebrain bundle (MFB) and inferior thalamic peduncle (ITP) are important descending pathways. The drawing also schematizes recently demonstrated connections (5) of the spinothalamic pathway with the medial dorsal nucleus and intralaminar nuclei. Scratching of the genitals and / or ejaculation have been elicited by stimulation at various points along this pathway and regions of its termination in the foregoing structures. Other abbreviations: AC, anterior commissure; AT, anterior thalamus; M, mammillary bodies. (From Paul D. MacLean).



The sexual system has extensive neural connections with other parts of the brain, it is highly probable that the sexual centers have significant connections, neural and / or chemical, with the pleasure and the pain centers of the brain. When we have sex, the pleasure centers are stimulated and this accounts for the pleasurable quality of erotic behavior. But when we are in pain, we do not feel like sex because the pain centers inhibit the sexual system. Indeed, all of human behavior is organised around the seeking of pleasure and the avoidance of pain, i.e. the seeking of stimulation of the pleasure center and the avoidance of pain center stimulation.

## **Endorphin**

Recent studies have indicated that chemical receptor sites are located on the neurons of the pleasure centers which respond to a chemical that is produced by brain cells. This substance is called "**endorphin**" because it resembles morphine in its chemical characteristics, as well as, its physiologic effects of causing euphoria and alleviating pain. It may be speculated that eating and sex and being in love i.e. behaviors which are experienced as pleasurable, produce this sensation by stimulation of the pleasure center, electrically or by causing the release of endorphins, or by both mechanisms.

Sexual desire must also be anatomically and /or chemically connected with the pain centers, for if a sexual object or situation produces pain - i.e. is experienced as destructive or dangerous - it will cease to evoke desire, in other words, pain has the capability of inhibiting sexual desire. Because our brains are organised so that pain has priority over pleasure, which makes sense from an evolutionary perspective, hence, individual survival must come before reproduction. When we perceive that we are injured i.e. (in pain) or in danger (fear), the pain center becomes activated and governs our functions, so that all our energies are focused on finding solutions e.g. (fighting, running, outmaneuvering, finding alternative strategies), instead of becoming distracted by sex and vulnerable because of our sexual urges. The ability of the pain centers to inhibit the sexual centers, which has clear adaptive value, is also the biological basis for the neurotic inhibition of libido.

It may also be speculated that neural connections exist between the **central sex centers** and the **spinal reflex centers** that govern genital functioning. Input from the higher centers can enhance or diminish the genital reflexes, thus, when libido is high, when a person feels sexy and sensuous, erection and lubrication are full and rapid and orgasm is easily achieved. In fact, erection and even orgasm may at times be achieved purely on the basis of external stimuli and fantasy without any physical stimulation of the genitals. But the opposite is also true, when desire is absent and the sexual experience is flat and joyless, the threshold for the genital reflexes is much higher. When one is not "turned on", it can take "forever" and the physical stimulus must be intense enough before the genitals will be able to function. A summary to the anatomy and physiology of the sexual response denotes that the sexual desire or libido, also termed "the sexual drive", is

produced by the activation of the neural system in the brain, while the excitement, plateau and orgasmic phases involve the genital organs. In both males and females, the excitement and plateau phases are produced by reflex vasodilatation of genital blood vessels. By contrast, orgasm essentially consists of reflex contractions of certain genital muscles. The two genital reflexes are served by separate reflex centers in the lower spinal cord.

### **Spinal cord reflex centers**

In both males and females two spinal cord reflex centers are located at T<sub>11</sub>, T<sub>12</sub>, L<sub>1</sub> and L<sub>2</sub> ; the second center is located at S<sub>2</sub>, S<sub>3</sub> and S<sub>4</sub> (T = thoracic; L = lumbar & S = sacral).

# **4**

## **THE PHYSIOLOGY OF COITUS IN THE HUMAN FEMALE**

- **Physiological responses of the sexually stimulated female.**
- **Clitoral versus vaginal orgasm.**
- **Non resolved sexual tension in females.**
- **Artificial vagina and vaginal agenesis.**
- **The erogenous zones and precoital petting.**



# THE PHYSIOLOGY OF COITUS IN THE HUMAN FEMALE

## Physiological Responses of the Sexually Stimulated Female

The physiological responses discussed in the sexually stimulated human female are based upon those mainly discovered by Masters and Johnson in 1966, (Figs. 9-20). They introduced the idea of a human sexual response cycle on the basis of extensive laboratory observations. Understanding well, the anatomic and physiologic changes that occur during sexual functioning is facilitated by consideration of this discovered model. However, it is important to recognize that the various phases of the response cycle are arbitrarily defined, are not always clearly demarcated from one another, and may differ considerably both in one person at different times and between different people. That is why the duration of a single phase may vary from person to person and within the same person dependent upon a complex of factors namely; psychological, emotional and physiological. Again the male and female sexual responses are essentially the same though there are some marked differences because during all varieties of sexual activity, the human body undergoes a number of physiological changes which form a typical definite pattern.

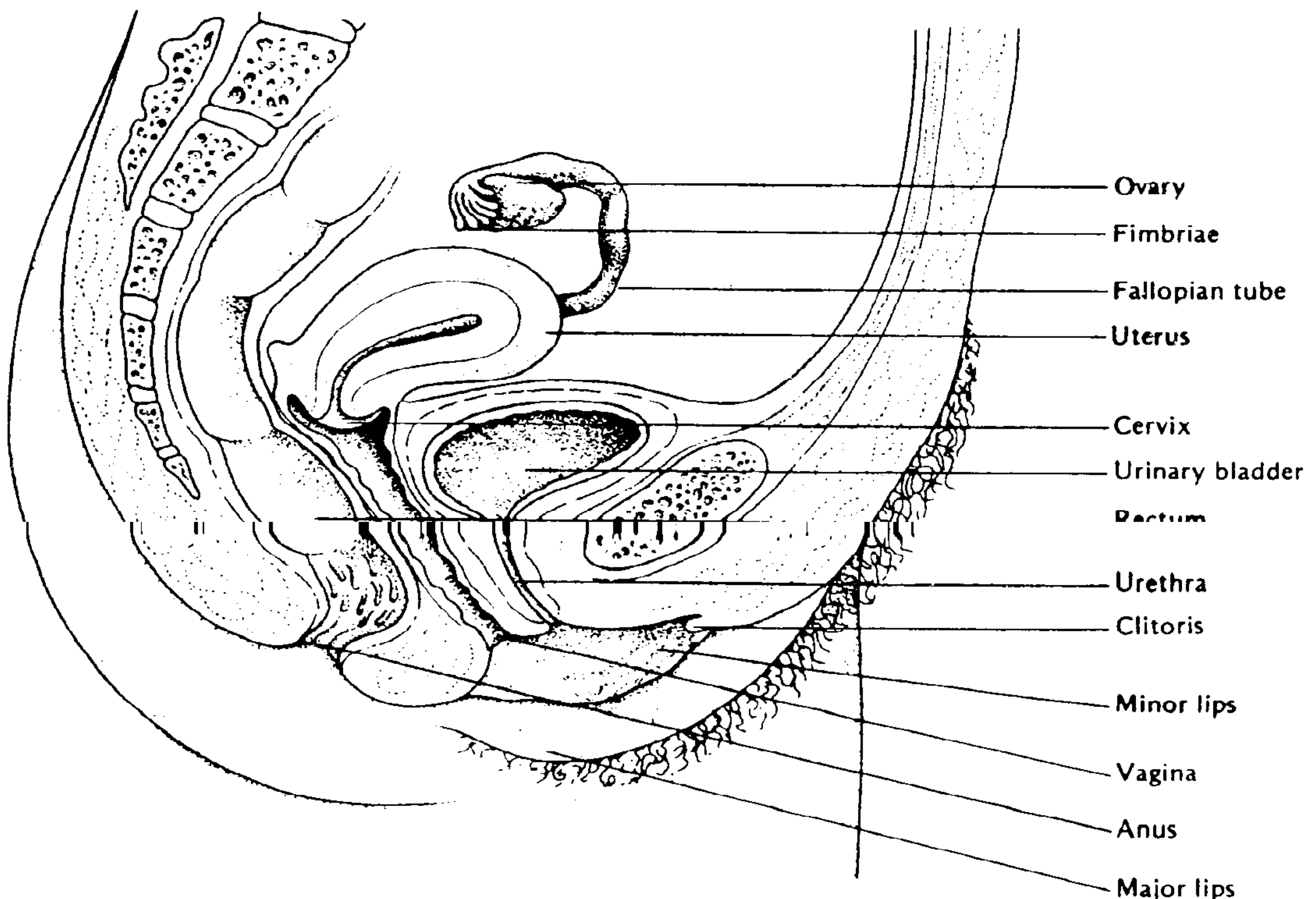


Figure 9. External and internal sex organs of the female (side view).

Very little was known about the physiology of the female sexual response till Masters and Johnson undertook their brilliant sexual research. For two decades, they studied the sexual behavior of men and women under scientific laboratory conditions; they observed and recorded approximately 14.000 sexual acts. They took, photographs of the external and internal female organs during various sexual activity which revealed the dramatic physiological and anatomical changes which prepare the female body for sexual intercourse. Johnson devised an artificial phallus made of clear plastic and equipped it with light and camera; as the woman copulated with the artificial penis, it was possible to photograph and record the various reactions of the clitoris, the labia, the vagina and the uterus during the four stages of the sexual response cycle.

Their observations included a wide spectrum of sexual behavior under every imaginable sexual condition. They studied coitus in various sex positions, between strangers and between happily married couples; between couples who had sexual dysfunctions and / or interpersonal difficulties. Different techniques of erotic stimulation were applied; such as visual and tactile eroticism during masturbation, homosexuality and lesbianism. All such sexual experiments were studied at different ages; from adulthood to old age in both males and females.

It used to be believed that females were slower to respond to sexual stimulation than males, however this belief is mistaken. Not only men but also women can become sexually aroused very suddenly, and some of them may experience one or more orgasms within few minutes. As a matter of fact, there are women who reach orgasm fifteen to thirty seconds after they begin sexual intercourse. It seems, however, that during the first stages of sexual arousal women are more easily distracted than men and depend more on continued direct physical stimulation. For this reason, many females seem to need a longer time to reach orgasm during coitus than their male partners, whose excitement is often sustained and increased by psychological factors. In general, females are less easily stimulated by mere erotic sights and sounds, or by erotic fantasies and anticipations. On the other hand, when the average female is able to concentrate on her preferred method of sexual stimulation (during masturbation for instance), she achieves orgasm just as quickly as the average male.

N.B.: It is very important to remind the reader that all these sex experiments were performed on non-circumcised females ...

### **( 1 ) Excitement phase**

Excitation occurs as a result of sexual stimulation, which may be either physical and / or psychic in origin. Sexual stimulation arising in situations without direct physical contact is neither unusual nor unexpected, since activation of many physiologic processes of the body occurs as a result of thought or emotion. For example, salivation and gastric acid production may be initiated by thinking about delicious food, sweating, tachycardia, and palpitations may be precipitated by fear or anger. At times, the excitement phase may be of short duration, quickly merging into the plateau phase; at other times however, sexual

excitation may begin slowly and proceed in a gradual manner over a long time interval.

### Changes in internal sex organs

In females, the first and most obvious sign of sexual excitement is the "**lubrication of the vagina**", known also as "**sweating of the vagina**". In response to effective sexual stimulation, which may occur very suddenly taking from 10 to 20 seconds, the vaginal walls which is relatively dry in the unstimulated state, soon provides a moist coating for the entire vagina in preparation for penetration. Without such lubrication, the insertion of a man's erect penis into a woman's vagina is painful for both. Few causes of vaginal dryness are insufficient or clumsy pre-coital petting or unwillingness of the female partner to join in the act of coitus. It is important to recognize that there are no secretory glands in the vaginal mucosa or submucosa but instead there is a well developed capillary system that surrounds the basal membrane. During sexual excitement **transudation** of fluid do occur as a result of vasocongestion producing this lubrication within the vagina and that the secretory glands lining the cervix do not contribute meaningfully to vaginal lubrication. The corresponding first sign of excitement in males is the erection of the penis, in short, as the penis becomes ready to enter the vagina, the vagina becomes ready to receive it. It is interesting to know that in cases of pronounced sexual excitation in some women with a resultant profuse vaginal lubrication, some male partners do complain about this excessive vaginal sweating not knowing the essential values of this lubrication. (Fig. 10)

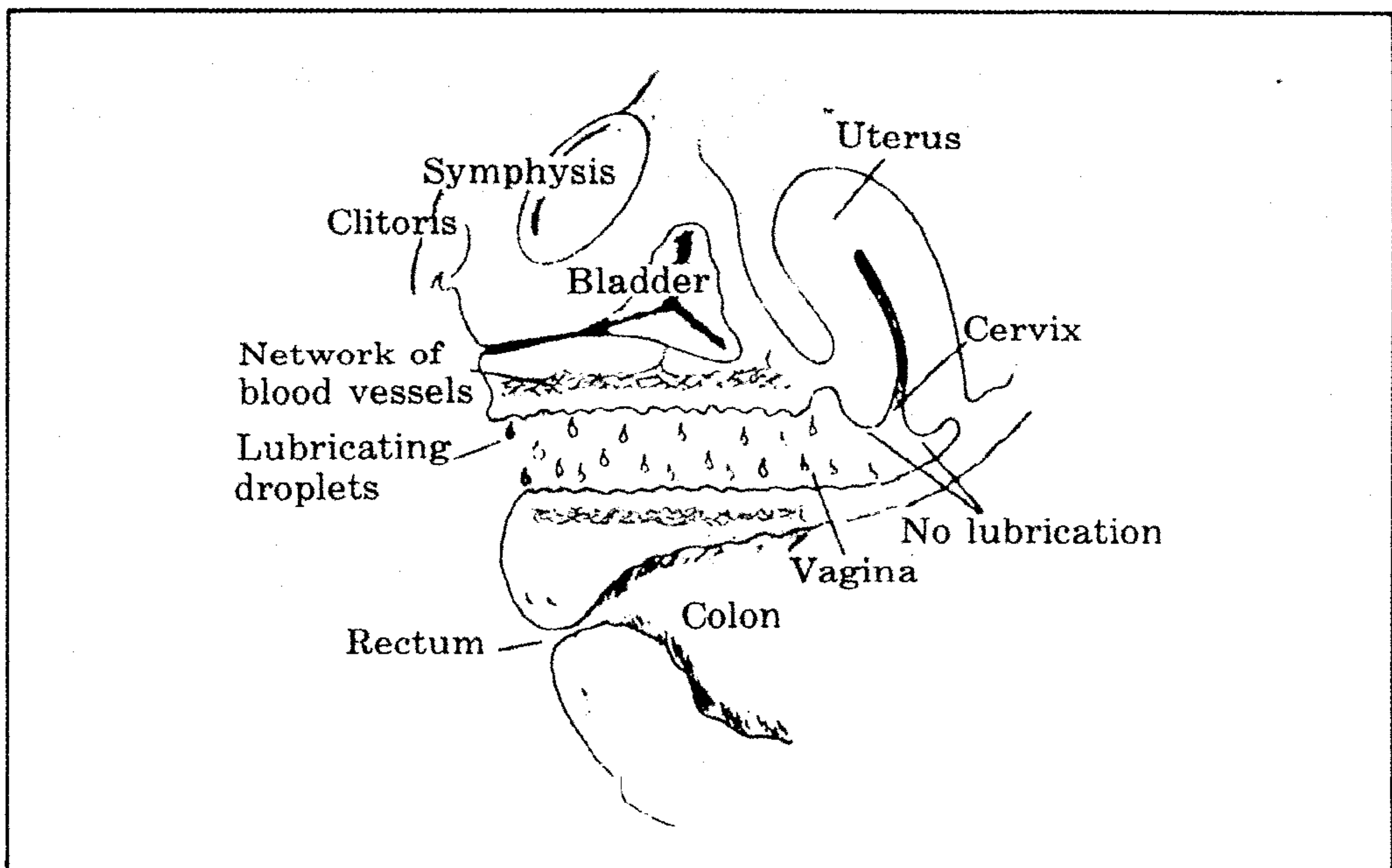


Figure 10. Vaginal lubrication in the excitement phase.

With continued sexual arousal, the inner two thirds of the vagina increase in both length and width creating a tenting balloon effect, namely what is called the **vaginal barell**. It is interesting to note that the vagina in its unexcited state, is a collapsed tube i.e. its walls are touching. It is not known precisely which muscles are involved in this phenomenon but the pubovesical ligament which contains a large proportion of smooth muscular element play an important role, when contractions of this ligament do accomplish the lifting of the anterior wall. It is very important to keep this fact in mind of all gynaecologists while fitting a woman with the vaginal diaphragm, to choose the right sized cap, often used as a local method of contraception. The color of the vagina change from the usual purple red to a deep purple color that becomes even darker during the following stages of excitement.

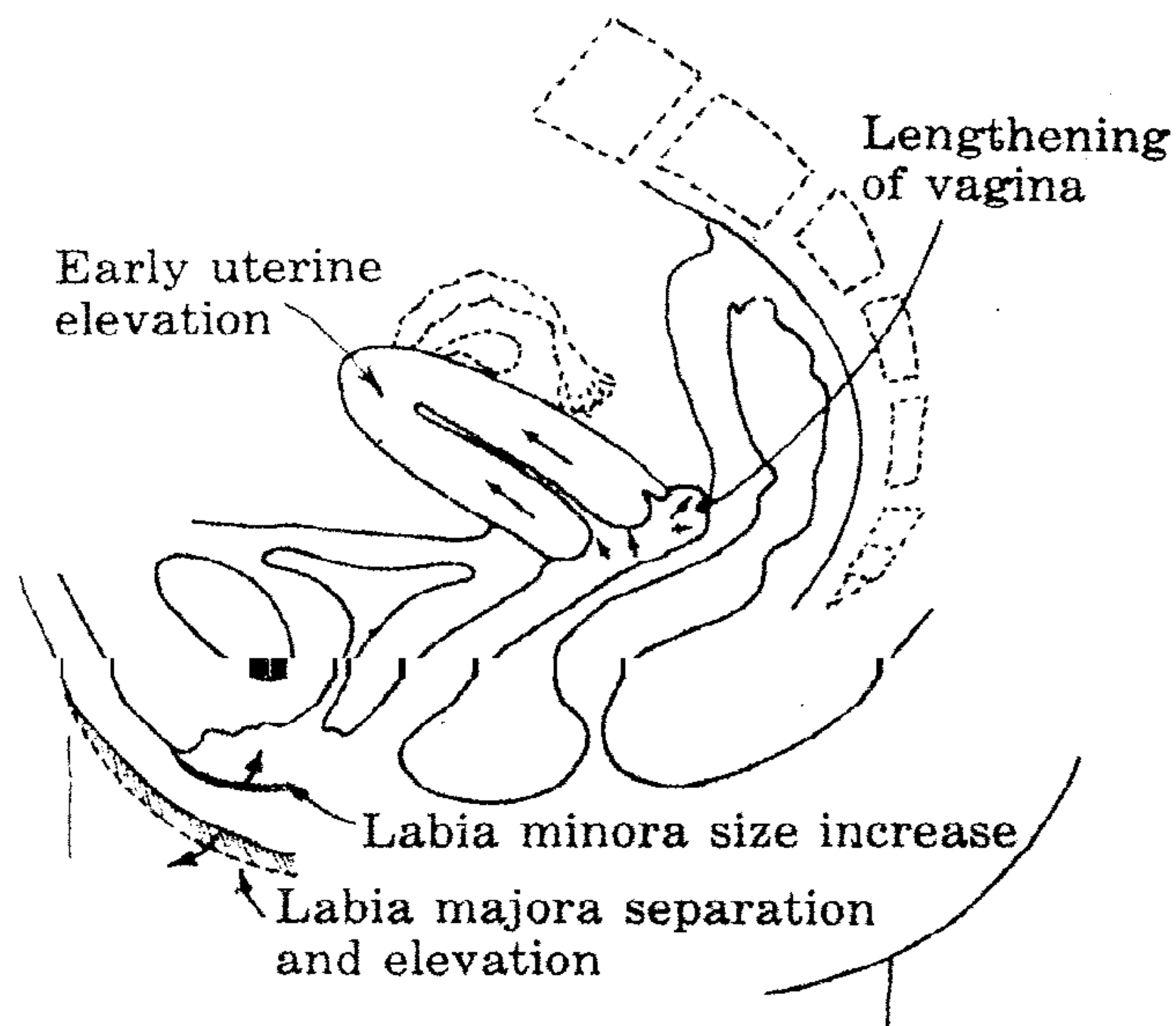


Figure 11. Female pelvis: excitement phase.

The **uterus** begins to enlarge due to the process of vasocongestion and is pulled upwards into the abdomen, thus contributing further to the lengthening of the vagina which was found to be increased by about 30% of the original length. (Fig. 11).

### Changes in external sex organs

The response of the **labia majora** in the female depends on her parity, if she is a nulliparous woman, sexual excitement will cause her major lips to flatten out due to enlargement and expose her vaginal introitus wide open. The labia majora in a multiparous woman are large and now they grow even larger as a result of engorgement and do expose the vaginal orifice in an exaggerated manner because they become elevated and separated.



The **labia minora** swell considerably in size in all females with sexual stimulation and they do change their color to a progressively deeper red while extending outwards all the time..

The **clitoris**, just like the penis increases in size as its erectile tissue becomes filled with blood and it gets firm in consistency as a result of the process of vasocongestion, although a true erection does not occur literally, because of the marked difference between the size of penis and clitoris. The increase in the size of the clitoris is most noticeable in the diameter of the clitoral shaft, while its length increases 2 to 3 times as much as the original one which is 4 x 4.5 mm in the average adult female in the flaccid non stimulated state. There is a pronounced increase as well in the size of the glans which becomes quite obvious in the sexually stimulated female (Fig. 12).

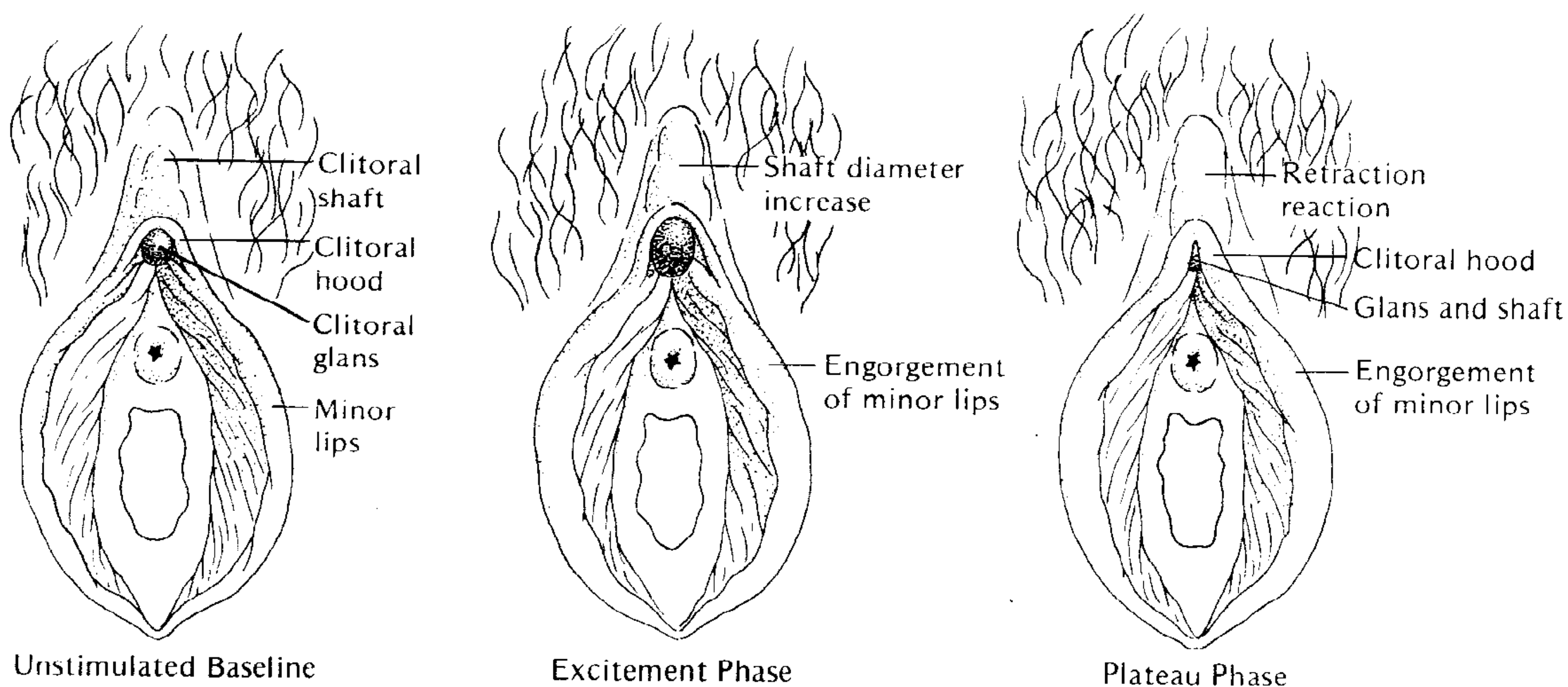


Figure 12. Changes in the shape and position of the clitoris during sexual arousal.

### Changes in other organs

During the sexual excitement phase, erection of the **nipples** is characteristic for most women, although both the nipples may not achieve full erection simultaneously, but this erection is found to be maintained throughout the other sexual phases. However, since the dark area around each nipple, and indeed the whole **breast** soon also becomes engorged and swollen so much so the nipple erection itself gradually becomes less conspicuous. In the late excitement phase, surface venous patterns of the breast become more visible and there may be a further increase in the size of the breasts, (Fig.13).

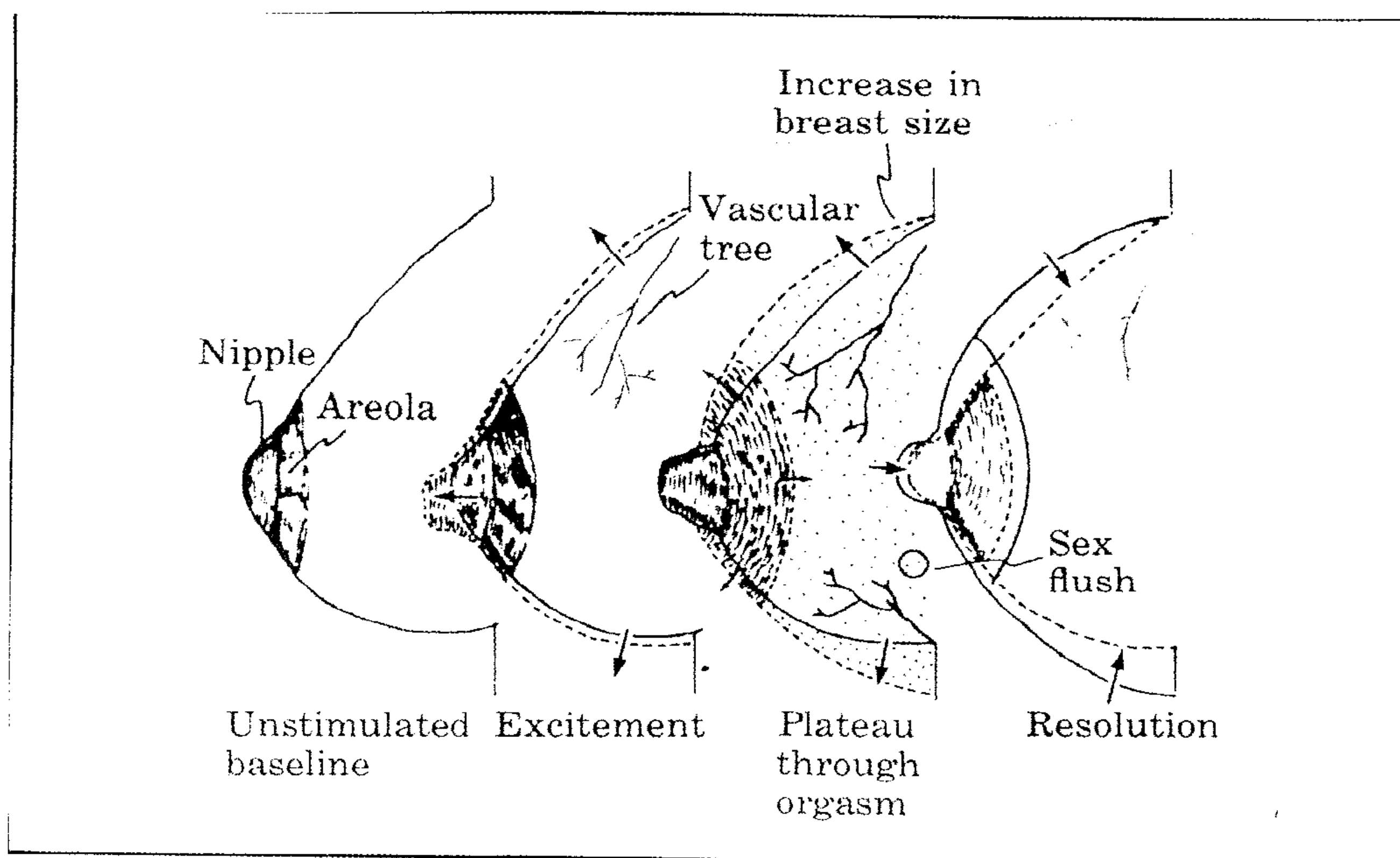


Figure 13. The breasts in the female sexual response cycle.

In the excitement phase, there is a marked **increase in sexual tension** above baseline (unaroused) levels and with mounting sexual tension, it produces **voluntary and involuntary muscular contractions** in various parts of the woman's body. There is an increase in the **heart rate** during the course of sexual stimulation which may reach as much as **180 beat per minute**, this maximal rate was recorded during the act of masturbation in contrast to lower rates reached during orgasm achieved while having coitus. The rapid fall of pulse rate after achieving orgasm indicates that the rise of the pulse rate has not been due to mechanical work exerted but mostly due to emotional factors.

In addition to all the mentioned signs of growing sexual excitement, most women, not all show the so-called "**sex flush**", it appears late in the excitement phase or early in the plateau phase. It is a red rash resembling measles, developing in 50 to 75 percent of women and in a smaller percentage of men. This sex flush generally begins in the epigastrium and then spreads rapidly over the breasts and anterior chest wall, but it may also be noted on other parts of the body, including the buttocks, back, extremities, and face. This rash lasts through the orgasmic phase and is most obvious in fair ladies and naturally not apparent in dark or black women.

In both men and women, the physical changes of the excitement phase are neither constant nor always ascending. **Distractions** of either a mental or a physical nature are quite likely to decrease the buildup of sexual tension, which is the hallmark of excitation. An extraneous sound e.g. a sharp knock on the door, a shift in position, or a muscle cramp, for example, are types of distraction that may occur. In addition, changes of tempo or manner of direct sexual stimulation can also temporarily disrupt the process of sexual arousal. The vasocongestive mechanisms of

the excitation phase do not constitute a quantitative appraisal of sexual arousal. In fact, an erection may be diminishing in firmness at just the time that excitation is heightening; likewise, vaginal lubrication may appear to have ceased, although neuromuscular tension is clearly nearing the plateau phase. It is advisable therefore, not to use **lubricants** unnecessarily unless prescribed, while noting all the time that the best natural lubricant for fertility purposes is the human saliva.

## ( 2 ) Plateau phase

The word plateau is meant to indicate that a certain level of excitement has been reached which is then maintained for a while before orgasm occurs. This phase physiologically and sexologically is the continuation of the excitement phase because it describes a higher degree of sexual arousal that occurs prior to reaching the threshold levels required to trigger orgasm. The duration of the plateau phase varies widely; it is often exceptionally brief in men who are premature ejaculators. In women, a short plateau phase may precede a particularly intense and powerful orgasm.

### Changes in internal sex organs

During this phase there is further increase in the length and width of the inner two-thirds of the vagina with a minor additional expansion in its size, and there is a corresponding increase in elevation of the uterus. The rate of vaginal lubrication often slows during this phase as compared to excitation, especially if the plateau phase is prolonged, (Fig. 14).

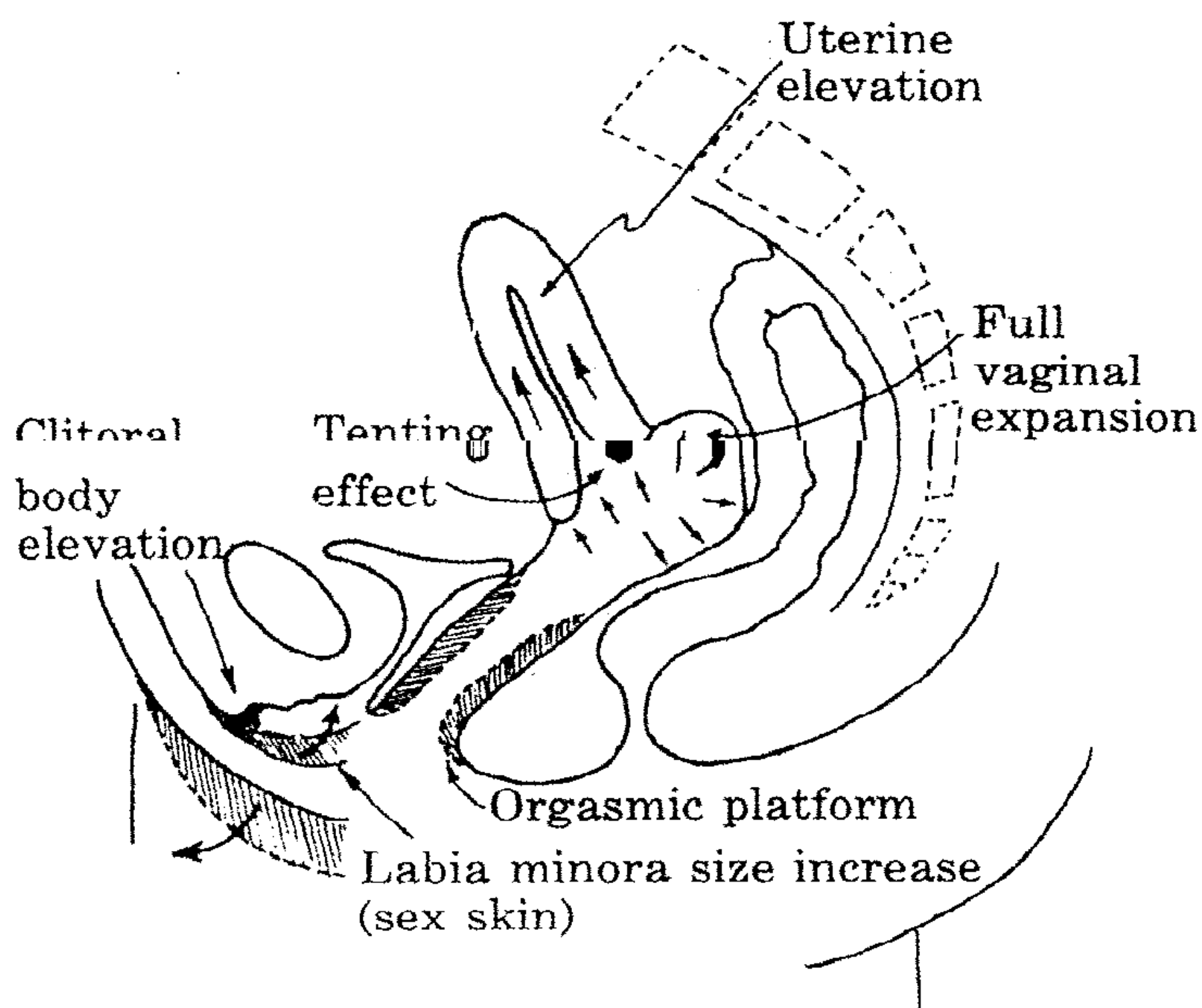


Figure 14. Female pelvis: plateau phase.

Prominent vasocongestion occurs in the outer third of the vagina, as a result, this part of the vagina becomes narrower by about 33%. This congestion and tightening of the outer third of the vagina has been named the "**orgasmic platform**". This narrowing action is one reason why the size of the penis is relatively unimportant to the physical stimulation received by the woman during late intercourse, since there is actually a "**gripping**" action of the outer portion of the vagina around the penis. Other reasons include the expansion of the inside of the vagina, which decreases direct stimulation received distally from penile thrusting regardless of penis length. Also the fact that the inner two-thirds of the vagina contains few sensory nerve endings, whereas, there is a richer concentration of such sensory nerve endings in the area in which the orgasmic platform forms.

The **uterus** undergoes still further increase in size and is pulled further upwards into the abdomen.

### Changes in external Sex organs

While the **labia majora** show no further changes during the plateau phase, the **labia minora** increase further in size and continue to darken in color, especially in multiparous women. This marked color change is a sign that orgasm is approaching, so much so, that if stimulation continues orgasmic release occurs a minute or a minute and half after the labia became bright red in color.

Once a certain level of excitement has been reached, the **clitoris** already erect, both the shaft and the glans become angulated and rotate ventrally 180° and retract under the symphysis pubis disappearing under the clitoral hood. This change, coupled with the vasocongestion occurring in the labia, makes it difficult to visualize the clitoris in this new situation and also partially masks the location of the clitoris to touch. It is interesting to note that direct touching of the clitoris now, may cause pain and discomfort but there is no loss of pleasurable clitoral sensations during these changes however, and stimulation to the general vicinity of the mons pubis or the labia will result in pleasurable clitoral sensations. In the past, it was not always understood that this retraction of the clitoris indicates an increase and not decrease of sexual excitement because the clitoris in this new position is indirectly squeezed by the male pubis in the lithotomy position (Fig. 15).

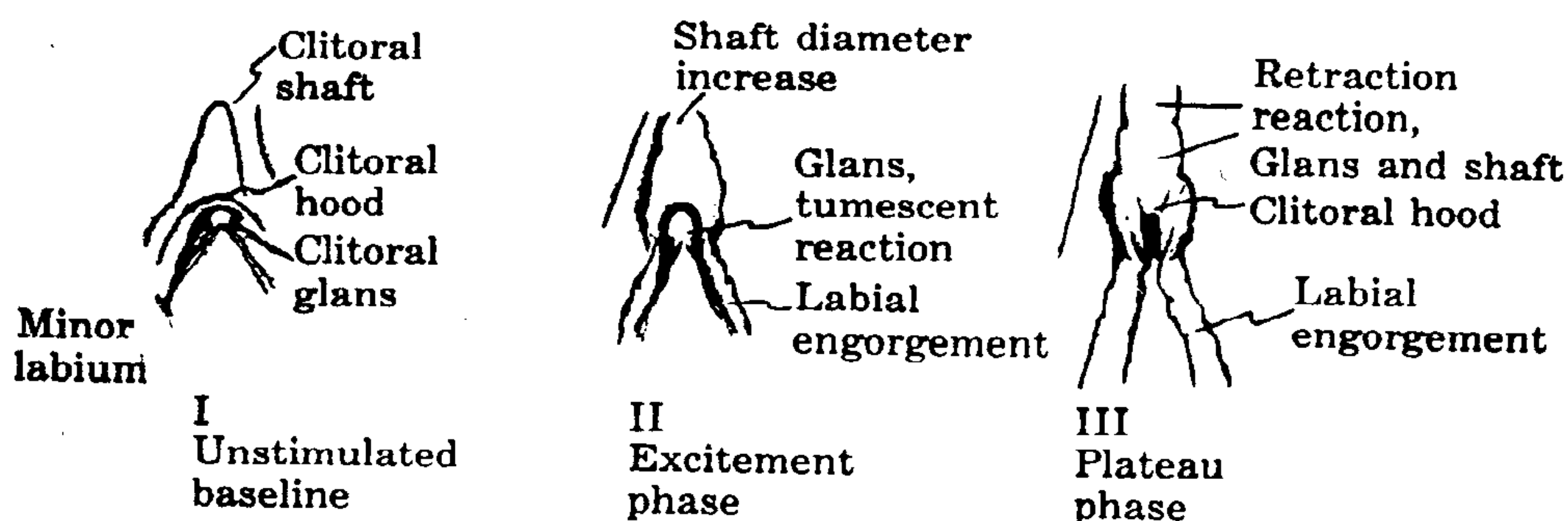


Figure 15. The clitoris in the female sexual response cycle (Plateau phase).



The greater vestibular glands (**Bartholin's glands**), which correspond to the bulbo-urethral glands (Cowper's glands) in the male, may secrete a small amount of fluid (about one to three drops) during this plateau phase or late in the excitement phase. It is interesting to note that the secretions of the Apocrine glands in the prepuce are meant to keep this area lubricated because direct tactile stimulation when dry may be intolerable since the clitoris is exquisitely sensitive to touch at this stage of sexual excitation.

### **Changes in other organs**

The **sex flush**, if it did occur, may now become more intense in color and cover a wider area of the body. Voluntary and involuntary muscular tension greatly increases throughout the body because of a **generalized mytonia**. Other extragenital features of the plateau phase common to both women and men include; **tachycardia**, **hyperventilation**, and an **increase in blood pressure**, these changes are primarily seen during the late plateau phase.

The **areolae of the breasts** begin to become engorged late in the excitement phase but during the plateau phase this areolar tumescence becomes so prominent, that it masks the already erected nipples. Increases in breast size during this phase are less pronounced in women who have previously nursed and lactated. In women who have not breast-fed a child increases in breast size of 20 to 25 percent above baseline levels are not uncommon.

For centuries, males have been concerned about **penile size**. To this day, the fear of having a smaller than normal penis is still a source of great anxiety. This fear is reflected in women's concern over clitoral size too, however here the concern takes two forms, fear that the clitoris is too large or that it is too small. If grotesquely large, partial excision may be recommended but the less drastic measure of imbedding the clitoris in the surrounding tissue is recommended surgically. If too small, hormones may be recommended but with great care.

### **( 3 ) Orgasmic phase**

The word "orgasmos" in Greek means "**Lustful excitement**", and an orgasm in the female is the sudden release of muscular and nervous tension, in other words, it is the climax of sexual excitement. "**The experience represents the most intense physical pleasure of which human beings are capable of and is basically the same for both males and females**". The specific neurophysiologic mechanisms of orgasm are not presently known, nevertheless, it can be postulated that orgasm is triggered by a neural reflex arc once the orgasmic threshold level has been reached or exceeded. An orgasm lasts only a few moments and is felt very much like a series of convulsions which involve the whole body and soon lead to complete relaxation and often sleep. In sexually mature males, orgasm is accompanied by the ejaculation of semen, and since women do not produce semen, hence, they do not ejaculate. However, in all other respects, the physiological processes are comparable in both sexes. Although the

experience of orgasm is essentially the same in men and women, still, it seems that nature did equip females to have more than one orgasm within a very short time. This capacity of being a "**multiorgasmic female**" is quite common in healthy females and is described as having a series of identifiable orgasmic responses without dropping below the plateau phase of sexual arousal. Strange enough, recent research proved that it is muscular endurance rather than feminine responsivity which is the limiting factor in a woman's coital responses as regards this power of multiorgasmic capacity. Men, however, do not share this capacity. Immediately following ejaculation, the male enters a "**refractory period**", during which further ejaculation is impossible, although partial or full erection may sometimes be maintained. This refractory period may last for a few minutes, or it may last for many hours; for most men, this interval lengthens with age and is typically longer with each repeated ejaculation within a time span of several hours. There is a great variability in the length of the refractory period both within and between individual men. The refractory period is not present in the female sexual response cycle, although most women are not multiorgasmic. There is one further difference, while the orgasmic pattern of males practically never varies, females may experience orgasm in a number of ways, (Fig. 16). In some women, orgasm is rather short and mild, in others it is extended and violent i.e. lasts longer and is rather powerful. Even one and the same woman may find herself responding quite differently on various and different occasions of sex stimulation. However, the basic physiological processes underlying these possible variations remain unchanged.

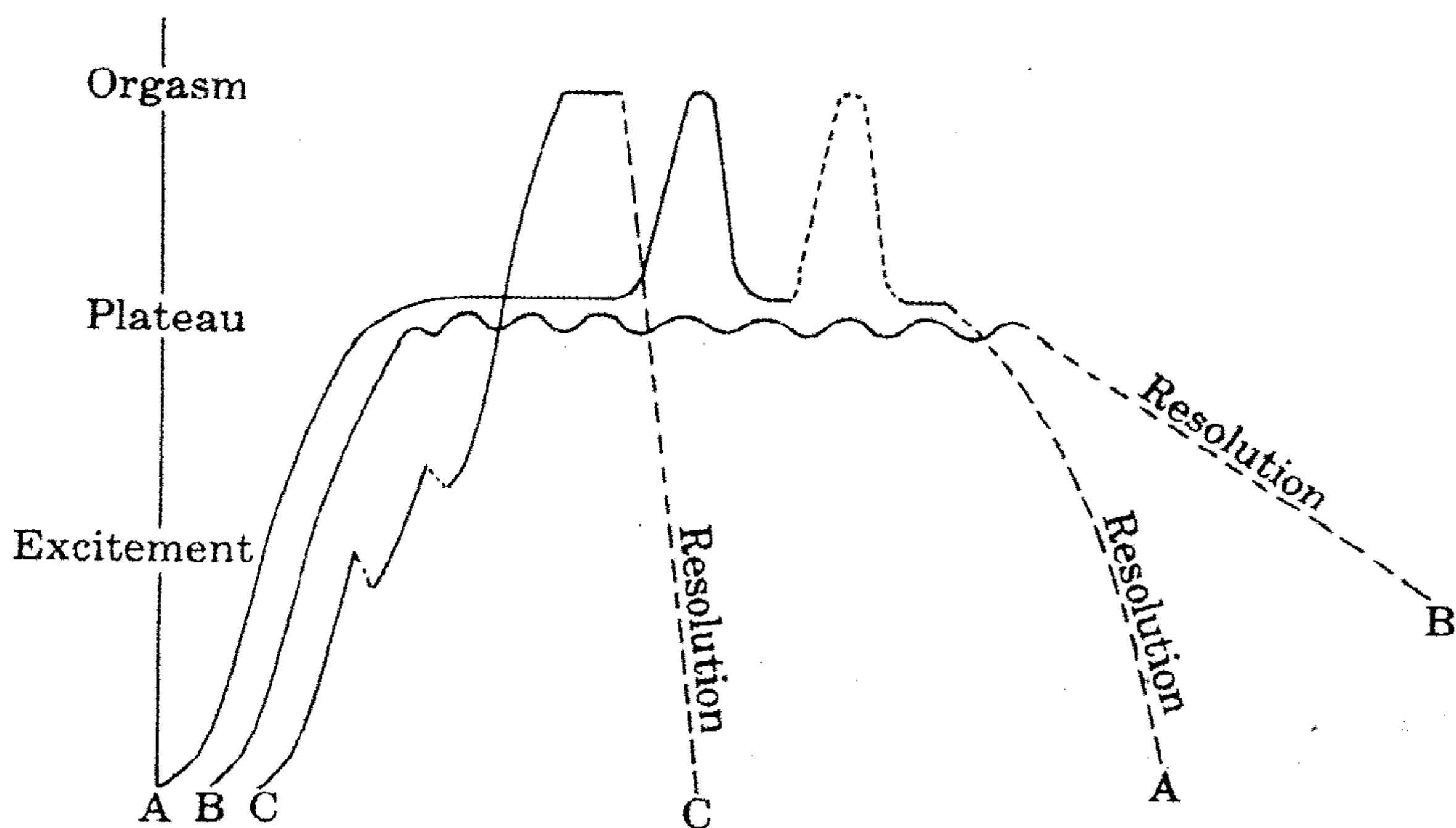


Figure 16. Various types of the female sexual response cycle.

#### Changes in sex organs

In human females, orgasm begins with simultaneous involuntary strong rhythmic contractions of the three following organs; the **orgasmic platform**,

(outer third of the vagina) the **uterus** and the **rectal sphincter**, beginning at 0.8 second intervals. These contractions, which may number from three to fifteen, first recur within less than a second, then they become weaker and at longer intervals, thus diminishing in intensity, duration, and regularity. The uterine contractions are known to be irregular, they do start at the fundus working their way downwards, not unlike the contractions that occur during the first stage of labour but naturally not painful. The cervix gapes its external os and remains open for nearly 20 to 30 minutes after orgasm. Surprisingly, the sphincter muscles of the rectum contract also for few times at the same intervals as the orgasmic platform, (Fig. 18).

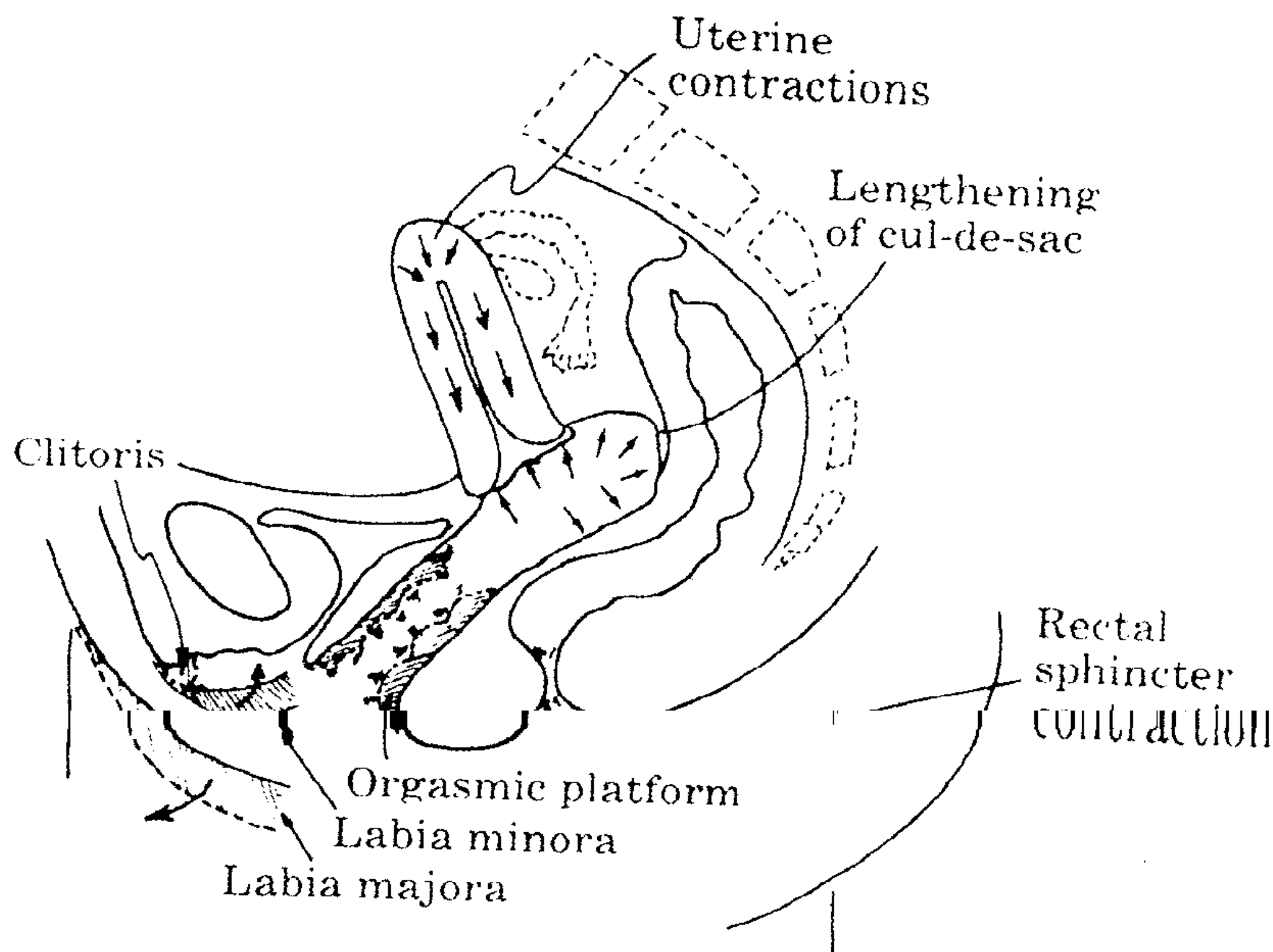


Figure 17. Female pelvis: orgasmic phase.

### Changes in other organs

Since orgasm is a total body response, not just a response localised to the pelvis, the presence of **great neuro-muscular tension** is not only in the entire pelvic area, but is also present in the neck, arms, hands, legs and feet. Dorsal flexion of the big toe as well as the foot appears occasionally, while the four lateral toes are kept in the flexion position for a long period. Electroencephalogram patterns measured during orgasm have shown significant changes in hemispheric laterality, as well as changes in rates and types of brain wave activity. Contractions of peripheral muscle groups have also been carefully measured, while the **pulse rate** and **blood pressure** rise greater than the levels reached during the plateau phase. Surface electrodes fixed on the thorax of female volunteers made electrocardiograms recording possible, while **breathing rate** is very fast indeed. It is worth noting that the intensity of all these physical reactions

depend, of course, on the degree and duration of the sexual tension achieved earlier. It is interesting to note that orgasm occurs naturally in women who have had a hysterectomy but it may not occur in those females who have had surgical excision of the clitoris or after the traditional and cruel operation of female circumcision. It is worth mentioning here that Johnson's research disproved in a way **Sigmund Freud's theory** about the two kinds of female orgasm namely; clitoral and vaginal. The research experiments proved that there is only one type of orgasm from the physiological point of view and that it is a sexual orgasm irrespective of how and where the stimulation has been applied. But, in recent research findings it was found that about 60 - 70% of women require manual clitoral stimulation during intercourse in order to reach orgasm...

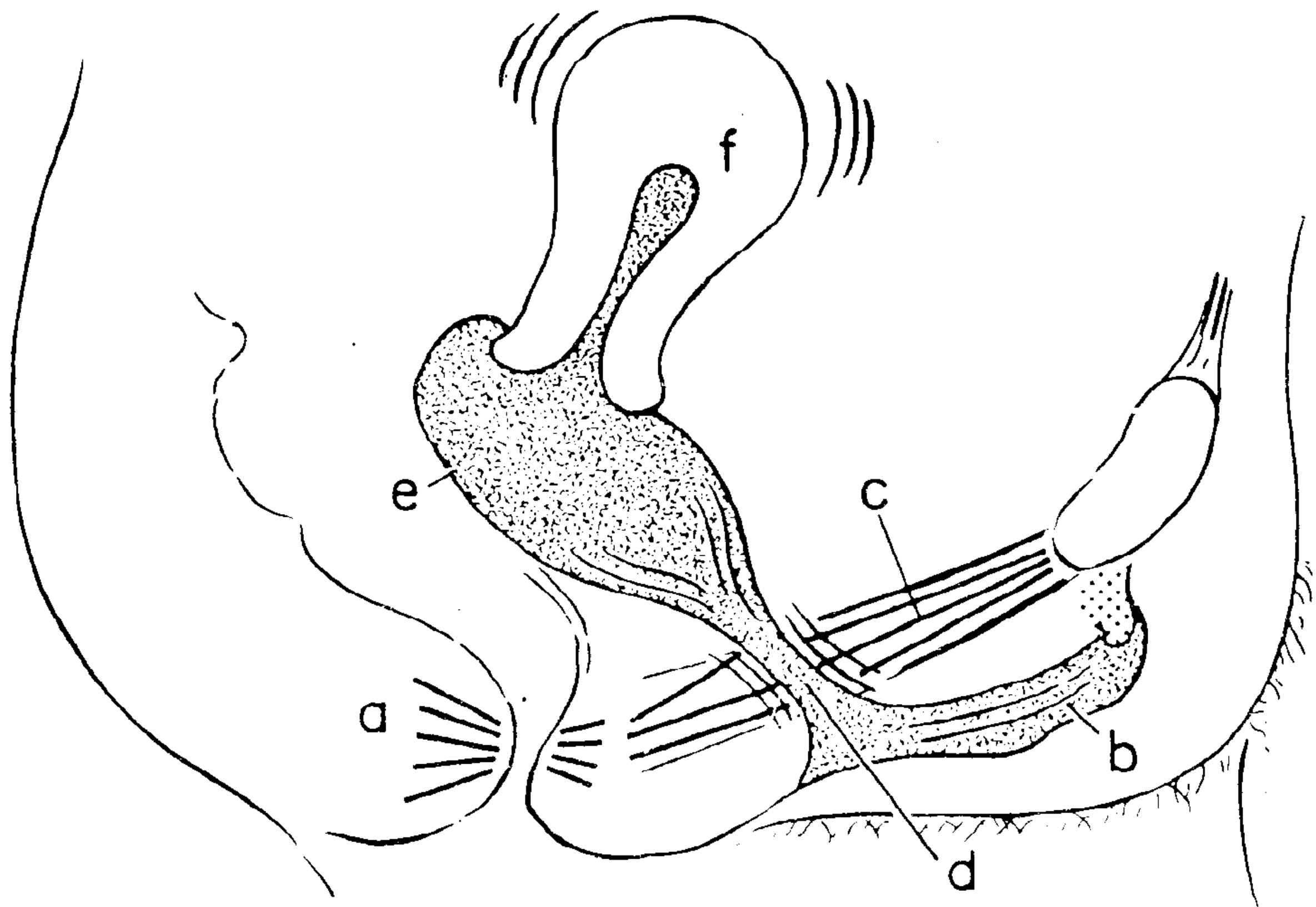


Figure 18. The female genitals and muscles during orgasm. The perineal (a), bulbocavernosus (b) and pubococcygeus (c) muscles contract with a .8/second rhythm causing pulsations of the orgasmic platform (d) and the vagina (e). The uterus (f) contracts also.

### Hormone release

The pupils get marked dilatation as a result of sudden activity of the sympathetic nervous system with the release of **epinephrine**. The release of the hormone **oxytocin** provoked by genital stimulation has been demonstrated in animals, and the oxytocin released was measured in the blood but the amount released during copulation was very low. In humans, the physiological significance of oxytocin release during sexual stimulation has not been clarified but it is possible and well documented that the release of oxytocin may precipitate labour in the pregnant woman. No wonder, some women in early labour believe



in enhancing their delivery by deliberately making love and indulge in forcible coitus !...

Experienced couples can sometimes time their orgasm to arrive together, a consummation desired by all and is termed "**synchronised orgasmic release**". This ~~mutual orgasm between the male and female sex partners~~ is a goal to be striven for, if it happens naturally and without trouble, but to search for this timed orgasm and to work hard for its occurrence is not advisable because this may deprive the act of its beauty and dehumanizes the process of coital love. The discharge of tension during the orgasm in both sexes and its extent varies immensely, both in different individuals and in the same person from time to time. In both sexes when the fullest pitch of orgasm is reached, sensations mount greatly till muscular movements become automatic which is quite apparent during pelvic thrusting. Feeling replaces thinking actually, and a blending of sensations occur such as blurring of vision. Sometimes, physical and emotional ecstasy may be so overwhelming that consciousness is very nearly lost among some females. Pleasure may be experienced throughout the whole body and need not to be limited only to the genital region.

It is strange that in some women so much feeling can be felt with so little outward manifestations apparent. By no means all husbands can perceive the moment of orgasm in their wives; indeed, many women can and do simulate orgasmic release, sometimes even without knowing exactly why they do so i.e. pretending to have had an orgasm!. Similarly, although a small proportion of women are able to feel semen as it reaches the vaginal walls, a far greater number cannot do so and admit feeling nothing.

#### **( 4 ) Resolution phase**

In the resolution phase, the anatomic and physiologic changes that occurred during the excitement and plateau phases reverse. After orgasm, the sex organs and with them the whole body need sometime to return to their unexcited state, (Fig.19).

#### **Changes in sex organs**

The congestion in the outer third of the vagina, namely the **orgasmic platform** disappears between 5 to 8 minutes as the muscular contractions of orgasm pump blood away from these tissues. While there are small almost trembling movements of the vaginal outlet and the area around it, thus the circumvaginal musculature's involuntary, rhythmic contractions in response to sexual arousal and orgasm come to a standstill.

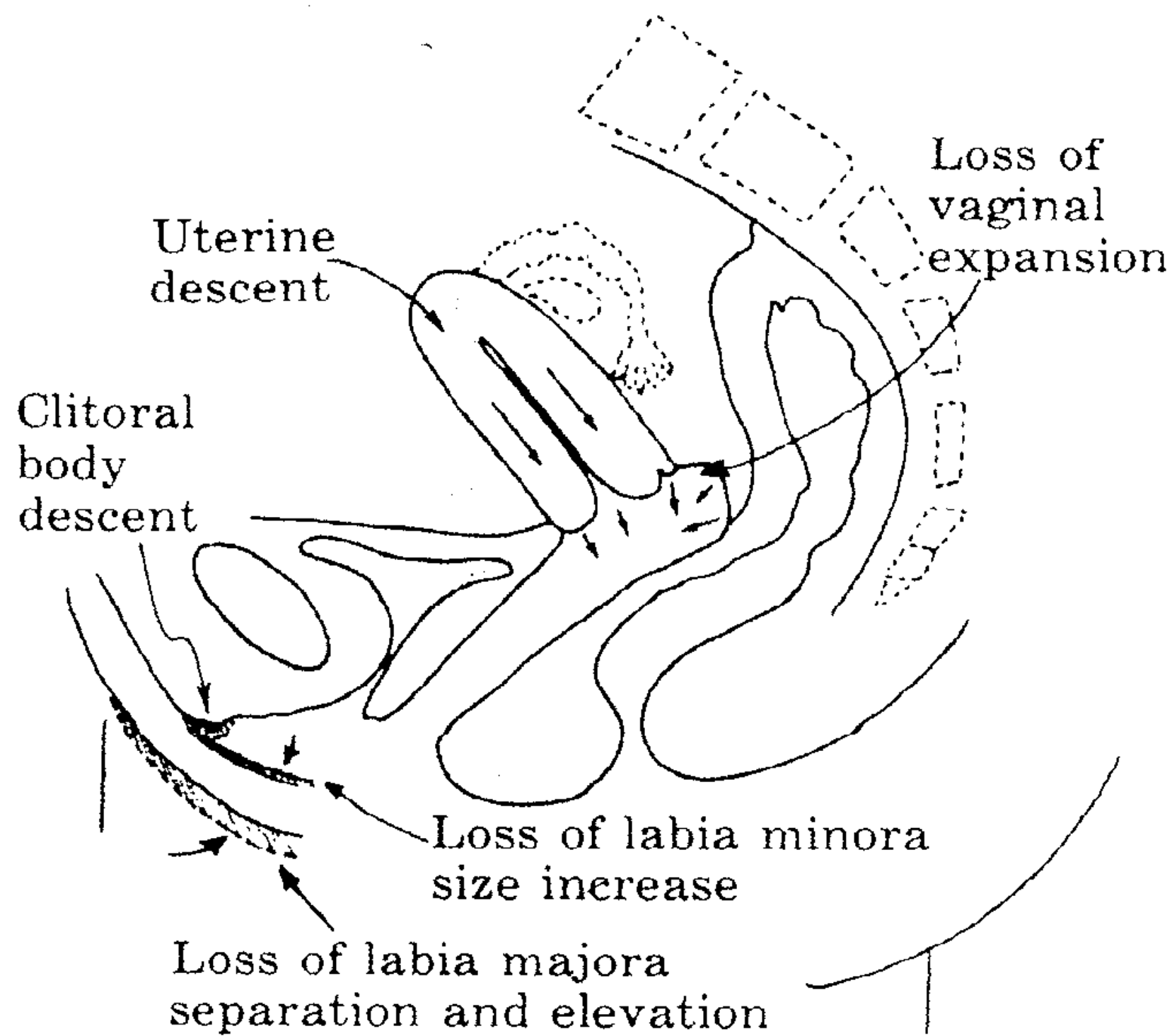


Figure 19. Female pelvis: resolution phase.

The **labia majora** and the **labia minora** assume their former shape and size, while the **clitoris** reemerges from under the clitoral hood taking about 5 minutes to return to its normal size and colour. The **uterus** also shrinks back to its normal size and as it descends from its elevated position in the abdomen, the tenting or ballooning effect in the inner two thirds of the **vagina** is eliminated. Amazingly the **cervix** now dips into the seminal pool collected in the posterior fornix if coitus was performed in the lithotomy position. With the uterus back into the true pelvis, the vagina is shortened in both width and length; the uterus and the vagina take about 5 to 8 minutes to return to their normal size, shape and position.

### Changes in other organs

The **sex flush** vanishes slowly, while the nipples of the **breasts** and the breasts themselves slowly return to their normal state of non excitement. With the release of muscular tension, the **pulse rate** as well as the **blood pressure** decrease while the **breathing** rhythm becomes normal again.

It should be pointed out that unlike men, many women do not seem to have a refractory period like men or at least it is not as obvious. In many cases continued or repeated sexual stimulation can bring a woman to a second and third orgasm immediately following the first one. Indeed, many women are capable of having many orgasms in quick succession. Obviously in this case, the resolution phase as described previously does not begin until after the last of these orgasms. This is the physiological explanation of a multiorgasmic female, which is quite different from the rare morbid condition known as "**Nymphomania**", which means excessive sexual desire in the female who could not be satisfied, i.e. never satisfied sexually. It is a rare condition of uncontrollable sexual desire in females; fortunately the condition is not common. It is actually very rare.

## Clitoral Versus Vaginal Orgasm

There has been a great deal of controversy and confusion regarding the role of the clitoris and the vagina in female sexuality which unfortunately was a major source of clinical error in the past. Is female orgasm clitoral or vaginal ? ... This specific controversial question really should be: Is it vaginal or clitoral stimulation that produces orgasm in females ? In the past, according to Freudian psychoanalysts, clinicians believed that clitoral sexual sensations were considered as a sign of neurosis !, while clitoral eroticism was diagnosed pathological ... Until Masters and Johnson demonstrated the fallacy of this theory in 1966. Recent studies by H. Kaplan and S. Fisher suggests that stimulation of the clitoris may always be crucial in producing female orgasmic discharge during coitus as well as other forms of love making and sexual foreplay.

Of all human senses, the sense of touch whether light or deep seems to be the one most often responsible for erotic arousal. It could be applied directly or indirectly to the target area through stroking, squeezing or mere pressure whether rhythmically or arrhythmic to the primary or the secondary erogenous zones. Johnson have clearly defined the function of the clitoris as the **"transmitter and conductor"** of erotic sensations. Anatomically, the clitoris is a small knob of spongy tissue, shaft and glans, 4 x 4.5 mm (Diknson atlas of sexual anatomy), located below the symphysis pubis. It has a rich nerve supply with a distribution similar to that of the glans penis with specialized sensory nerve endings, namely the Pacinian corpuscles. Touching the clitoris is experienced as intensely pleasurable by most females, however, the clitoris is so exquisitely sensitive to touch that **direct** tactile stimulation of that area may be intolerable, especially when it is not well lubricated, but the natural presence of the secretions of the Apocrine glands is quite sufficient for such lubrication. Most females prefer **indirect** clitoral stimulation, either by pressure on the mons veneris or by lateral stroking of the clitoral shaft through the labia minora. Incidentally, this is exactly what happens during the plateau phase of the sexually stimulated female when the angulated erect clitoris rotates ventrally 180° and retracts under the symphysis pubis while covered by its clitoral hood to become squeezed indirectly by the male pubic bone in the lithotomy position. The same squeezing happens during the female astride position which is the face to face woman above. This sex position incidentally is preferred by a lot of American women nowadays as proved by Prof. Hunt with the percentage of 75% in favor, in contrast to a research done by Kinsey et al. in the fifties reaching 45% only. These women confess to the fact that the astride position enhances their orgasmic release due to their erotic satisfaction in response to the **(Kinesthetic sense)** which is the sense of active body movements namely the active pelvic thrusting. Some authorities attributed the popularity of this sex position nowadays due to the increase of women's rising expectations of maximum and full sexual satisfaction during coitus.

As a matter of fact, this female astride position is advised strongly by most sex therapists to be used during the treatment of premature ejaculation in males and for ejaculatory incompetence of the partner during their sex therapy because

it alleviates possible performance anxiety. Women who are lacking orgasmic capacity and not truly frigid benefit enormously from this face to face woman above during their treatment.

In contrast, with the exquisite sensitivity of the clitoris, the vagina is sensitive to touch **only** near its entrance. The vagina anatomically is a flexible barrel of smooth muscles with some striated musculature near the introitus; lined with a mucous membrane which is supplied with touch fibers only within its entrance as well as proprioceptive and stretch sensory nerve endings in the deeper tissues especially in the outer third. Contraction, palpation, distention and deep pressure especially at 4 and 8 O'clock at the entrance and the outer third of the vagina are reported by many investigators as highly pleasurable and erotic by many women. Some women report that they respond to a combination of vaginal and clitoral sensations, but the majority reveal that clitoral stimulation makes the most important contribution to orgasm; while pure vaginal stimulation does not lead to orgasm unless it is accompanied and augmented by highly erotic fantasies !... Clitoral stimulation regularly produces orgasmic release, perhaps this is evidenced most convincingly by the fact that female automanipulation such as during masturbation and lesbian love is almost universally directed at stimulation of the clitoris. Strangely enough it has been proved that few women attempt achieving orgasm by inserting phallic like objects into the vagina such as vibrators or an artificial penis.

Many authorities now are sure that even during coitus, it is clitoral stimulation that triggers the female orgasm because the clitoral hood is connected to the labia minora anatomically. Significantly during coitus the powerful thrusting of the penis exerts rhythmic mechanical traction of the labia minora and so provides stimulation for the clitoris via movements of the clitoral hood. In the final analysis, it is stimulation of the clitoris via the pubic bone pressure and by the labia minora- clitoral hood mechanisms and not pure stimulation of the vaginal introitus which produces the ultimate coital orgasm in most women. Maclean, Kaplan and Money confirmed Masters discovery that 60-70% of women investigated require manual clitoral stimulation during sexual intercourse in order to reach orgasm. Strange enough, although stimulation of the clitoris seems to be the crucial element in the production of female orgasm, it is surprising that the clitoris itself plays no role in its actual execution ...

It is now believed by all authorities that all female orgasms are physiologically identical, triggered by stimulation of the clitoris and expressed by vaginal, uterine and anal contractions. Accordingly, regardless of how friction is applied to the clitoris, by the phallus of the male, by the woman's fingers during masturbation or even by a vibrator or any other desired object; female orgasm is almost always evoked by clitoral stimulation. Thus the physiology of the female orgasm is analogous to that of the male; because tactile stimulation of the glans penis and the penile shaft triggers the male orgasm at the end of the plateau phase once a certain level of sexual excitement has been reached or exceeded.



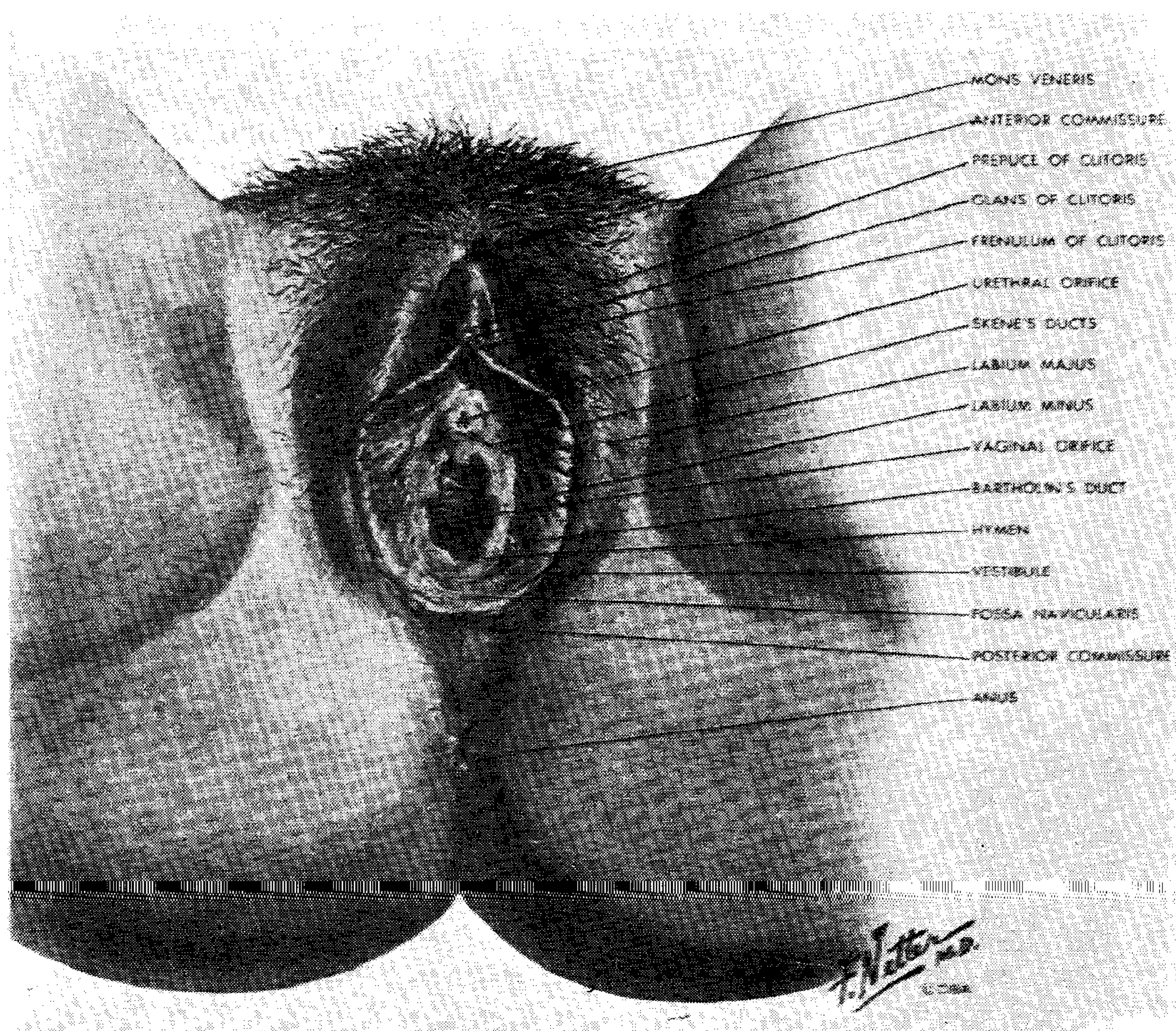


Figure 20. External female genitals after intercourse (non circumcised woman)

## Conclusion

It is worth mentioning here this starking recent evidence which was proved beyond doubt of how valuable and important the critical role played by the external genitalia namely; the clitoris and labiae during coitus in order to achieve orgasm; to convince forever the public in Egypt and Africa to stop and abolish their awful practice of female circumcision better named female genital mutilation (FGM).



# Non Resolved Sexual Tension in Females

## Anorgasmia

If the orgasmic release has been obtained successfully, then there is rapid detumescence from the naturally accumulative physiological processes, namely, what happens actually during the resolution phase. Sometimes, the loss of **muscle tension** and its decrease, as well as the process of drainage of venous blood from the state of **congestion** is much slower and is definitely retarded if an orgasm has not been experienced. A good example of this condition is the practice of **coitus interruptus** chronically, because there will be signs and symptoms of residual sexual tension as well as non resolved vasocongestion. They are manifested commonly as **bilateral adnexal pains**, **low backache** with increased varicosity and the possible formation of varicocele when the condition becomes chronic. **Low abdominal pain** indicative of uterine vasocongestion in females, long neglected and misdiagnosed oftenly is indicative of **non-orgasmic coitus** and / or **long exhaustive making love**. Masters and Johnson reported in 1979, that this pain was well pronounced in women who practiced sexual excitation only, without proceeding to full consummation of the whole coital process; typical of this condition also is **Lesbian love making** and **Teaser's sexual play**.

It is fair to add to this medical syndrome of non-resolved sexual tension that in Egypt; the majority of handicapped females who were circumcised and who are unable to achieve orgasm (Karim and Ammar, 1966).

The **nervous strain** commonly produced by the practice of coitus interruptus is by no means limited to the husband, because it may produce little or no disturbing effect on a woman who is able to achieve an orgasm before or in spite of the interruption of intercourse. Nor, will it disturb a woman who is equally frigid whether intercourse is interrupted or not. But if the woman is capable of orgasm and misses it because her husband withdraws his penis out of the vagina, it can be said with certainty that nervous strain will ensue and mount. The repetition of this technique of withdrawal leads to vasocongestion of the pelvic organs. Most males know that repeated sexual frustration produces aching testicles, often associated with low backache, an equivalent process is found in women. The vague low abdominal pain caused by congestion of the uterus and the ovaries is puzzling to the woman and sometimes - if he is not told the full facts- to her gynaecologist, too...

Most women, when they are repeatedly subjected to coitus interruptus develop what is known as "**protective frigidity**". In such a state, they generally suffer nervous upsets of bodily health or of mood, the condition may be slight or severe, but the most common complaints doctors are all aware of perhaps are attacks of depression or irritability, excessive worrying about unimportant things, anxiety attacks including claustrophobia and, generally an increasing sexual disinclination or frank frigidity. Physical disturbances such as early fatigue, digestive disturbances e.g. dyspepsia, palpitations, insomnia and the famous spastic colon..., are quite common findings.

The well known condition of nervous strain termed "Anxiety neurosis", occur often when emotional or sexual tension is allowed to pile up with a high pitch of erotic desire is repeatedly reached and fails for some reason or another to be released by an orgasm. Men experience acute sexual frustration less often than women, because with them orgasm of some sort usually occurs whether by orgasm during sleep or by masturbation. In females spontaneous relief may be less easy to achieve and hence it is one of the reasons why anxiety neurosis is a condition more often found in females than in males.

## **Artificial Vagina and Vaginal Agenesis**

About 18,000 females in the U.S.A. are born without a vagina annually recorded in 1960, surgery is known to create an artificial vagina by grafting skin from her thigh or abdomen. It was suggested by Masters that the use of non-surgical techniques, namely the application of perineal dilators, which by gentle stretching of a small dimple of skin where the vaginal orifice should be, ultimately creates a vaginal barrel. During long term follow ups of detailed physiological and psychological results of the artificial vagina, they found that despite the fact that the artificial vagina is lined with skin and not with mucous membrane as a true vagina, over weeks and months the skin lining comes more and more to resemble the lining of a true vagina and at last even transudates a lubricating fluid. In fact, in almost all significant aspects, vaginal agenesis and patients with artificial vaginas are found to respond to sexual stimulation in precisely the same way as other women. Some do conceive and bear children if the rest of the genital tract is normal, delivery is either by the normal route or by surgical intervention.

## **The Erogenous Zones and Precoital Petting**

In Greek Eros means love, while genesthai means to produce, so literally it means **love producing zones**. Now, every healthy and sane person is able to respond to sexual stimulation, while the response is never exactly the same in any two individuals, its basic physiological patterns is the same and is shared by all men and women. However, the intensity of these physiological reactions are never exactly identical in any two persons or even in the same person on different occasions. Also, the specific responses of a particular individual are bound to show some individual variations, for example, it is possible for some men to get an orgasm and ejaculate with a limp penis i.e. non erect penis.. while with others it may be n/e impossible. The same holds good for women, one female could be multiorgasmic, while her sister cannot achieve even sexual arousal.

### **When**

Human beings can be sexually aroused at nearly all times, in many different ways and by a great variety of objects. For example, man's excitement may be triggered at any hour of the day or night, by sight or touch of certain persons or things, by certain smells or sounds or simply by some thoughts,

recollections or mere sex fantasies. Since the possible sources of sexual stimulation are so numerous and varied, they are not easily listed or classified, nevertheless, it is very useful to know the obvious stimuli that can produce sexual responses.

Of all human senses, the **sense of touch** seems to be the one most often responsible for erotic arousal. Some areas of the body surface in the skin and some deeper tissues, contain more nerve endings than others and hence more sensitive to the touch whether light or deep. A good example, is the glans of the penis and the glans of the clitoris, they both contain the **Pacinian corpuscles**, which are highly specialised nerve cells and they are both especially receptive to sexual stimulation.

## **Where**

The best known and well established erogenous zones in the human body are the glans penis and the penile shaft in the male; the clitoris, the two labia minora and the orgasmic platform in the female; these are the **primary erogenous zones**. (Figure 21).

In both women and men other erogenous zones are known to be among the areas between the sex organs and the anus, the anus itself but not the rectum, the buttocks, the inner surfaces of the thighs, the breasts especially the nipples, the neck, the mouth namely the lips and tongue and lastly the ears; these are the **secondary erogenous zones**.

## **How**

Touching, stroking, tickling, rubbing, slapping, kissing or licking these areas can often create or increase sexual excitement. However, this response is by no means automatic because a great deal depends on the person's previous conditioning and on the circumstances under which the sexual stimulation occurs. For example, when a doctor touches a patient's erogenous zones in the course of a physical examination there may be no sexual response at all e.g. gynaecological examination, neither is such a sexual response likely to happen in cases of rape...

In short, **psychological factors** usually play a decisive role in tactile stimulation although there are some exceptions to this medical rule, as in certain cases of spinal cord injury, the injured man can have an erection when his penis is fondled, although the stimulation may not register in his brain. No wonder, because of their different experiences, different individuals are likely to develop different degrees of sensitivity, since **negative mental associations** can prevent any sexual response to touch. In fact, there are people who want to be touched as little as possible even during sexual intercourse. On the other hand, pleasurable sexual encounters can develop a welcome sensitivity almost anywhere in the body and thus lead to the discovery of new erogenous zones unknown to both husband and wife...



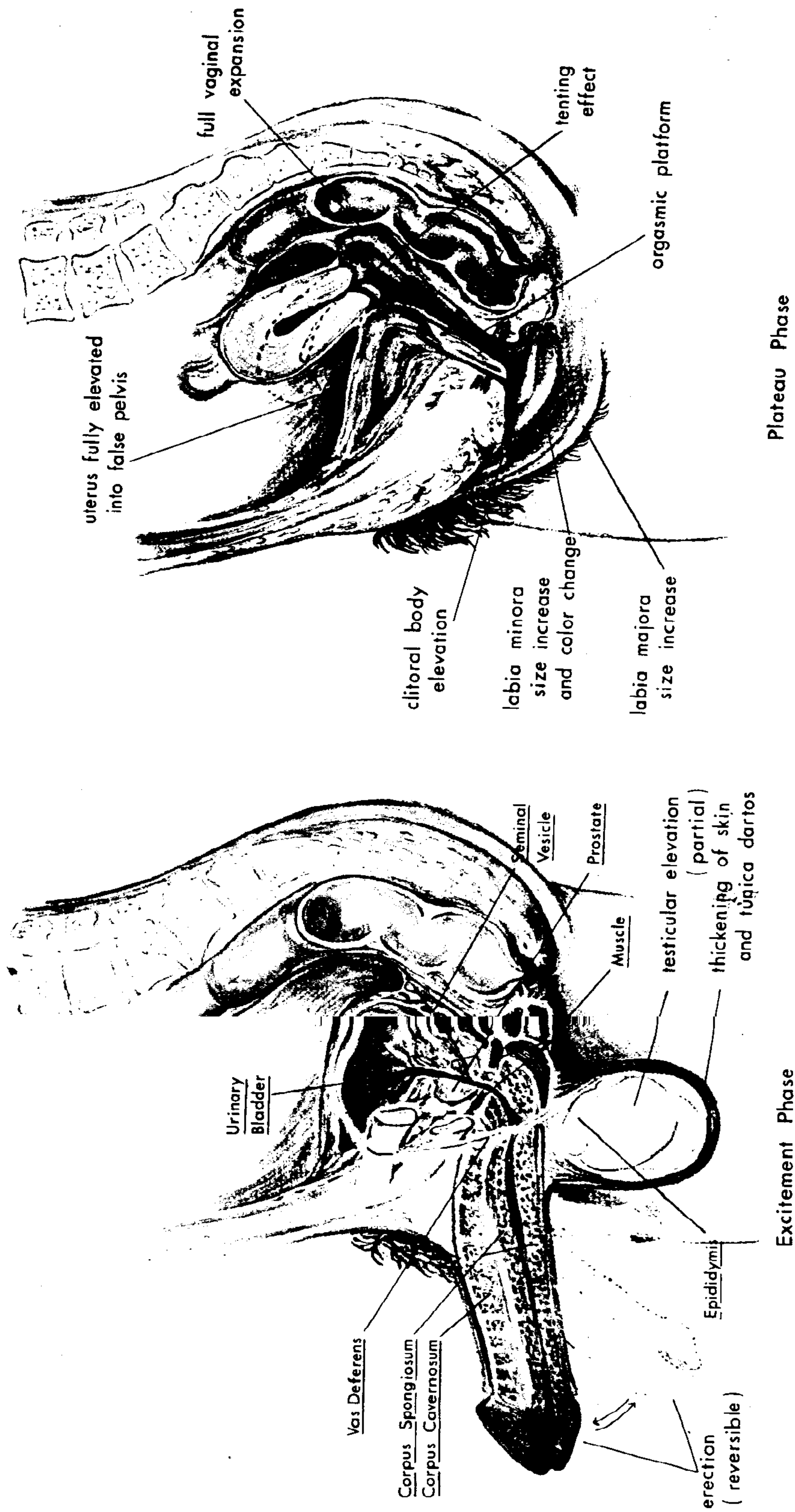


Figure 21. Primary male and female erogenous zones

Male: (Penis only)

Female: (Clitoris - Labia minora - Orgasmic platform)

In the final analysis, people making love have to find out for themselves which parts of their own or their partner's bodies most readily respond to caresses and sexual stimulation. No wonder, successful and efficient precoital petting is a must for vaginal lubrication and pleasurable easy penile penetration. However, it was found that women are more easily distracted from sexual activity even when aroused and many of them reach orgasm only as a result of **sustained and continuous direct physical stimulation**. Also, the average healthy female is less easily stimulated sexually by mental images alone unlike males. Please refer to the chapter of female dysfunctions discussing the treatment of frigidity and wonder at the beautiful words of our Prophet Mohamed teaching us the great values of sexual foreplay since nearly fourteen hundred years !.

### **Other senses**

Most people are well aware of the fact that they can become sexually aroused not only by persons or things they touch but also by what they may see, hear, smell or taste. The sight of a beautiful body, the sound of a musical voice, the smell of a perfume, the taste of certain foods or of a lover's glandular secretions can be powerful sex stimulants. However, their effect depends entirely on **mental associations**, for instance, a particular person becomes excited by a particular sight, sound, smell or taste because he or she associates it in his or her mind with a previous pleasant sexual experience. On the other hand, unpleasant associations produce negative reaction, they can reduce or extinguish sexual excitement, no wonder, male sexual inadequacy is so prevalent.

### **Culture**

It follows from these observations that there are no constant erotic sights, sounds or smells as such, they only become so through certain erotic experiences. It is not surprising therefore, that at different times and cultures people have felt attracted to very different ideals of sexual beauty e.g. in the past, Arab men usually preferred well padded women!. A certain piece of music may appear stimulating to some males but not others e.g. Jazz music appeals plenty to young Western cultured people. While the "el-zarr" music have a stimulating effect on some of our backward women; the African drums would be said to have the same stimulating effect on most of our African inhabitants.

Human beings in general depend very much on **psychological factors** in their sexual responses and many people become aroused sexually by mental images alone. Indeed, there are some individuals who are able to reach orgasm simply by fantasizing about sexual matters. It seems however that erotic thoughts, sexual fantasies and anticipations have a more stimulating effect on males than on females, that is why during sexual activity, most females reach orgasm only as a result of continued direct physical stimulation.

It should be mentioned here that certain sexual responses can occur for entirely non-sexual reasons, for example, many men know that they may have erections when lifting heavy weights or when a full urinary bladder causes some physical irritation. Also the state of priapism, which is the painful inability to lose erection which could seriously damage the penis unless treated immediately.

# **5**

## **THE PHYSIOLOGY OF COITUS IN THE HUMAN MALE**

- **Physiological responses of the sexually stimulated male.**
- **Size of the penis.**
- **Relation between anger and sex.**
- **Orgasm during sleep.**

# THE PHYSIOLOGY OF COITUS IN THE HUMAN MALE

## Physiological Responses of the Sexually Stimulated Male

In a physiological research laboratory recordings of the extra-genital reactions, as well as, observations of genital responses were recorded before, during and after sexual stimulation. The basic male human sexual responses fall into five different phases, which were described by Masters and Johnson in the year 1966. These phases were termed: Excitement phase, plateau phase, orgasmic phase, refractory phase and the resolution phase, (Figs, 22 - 29).

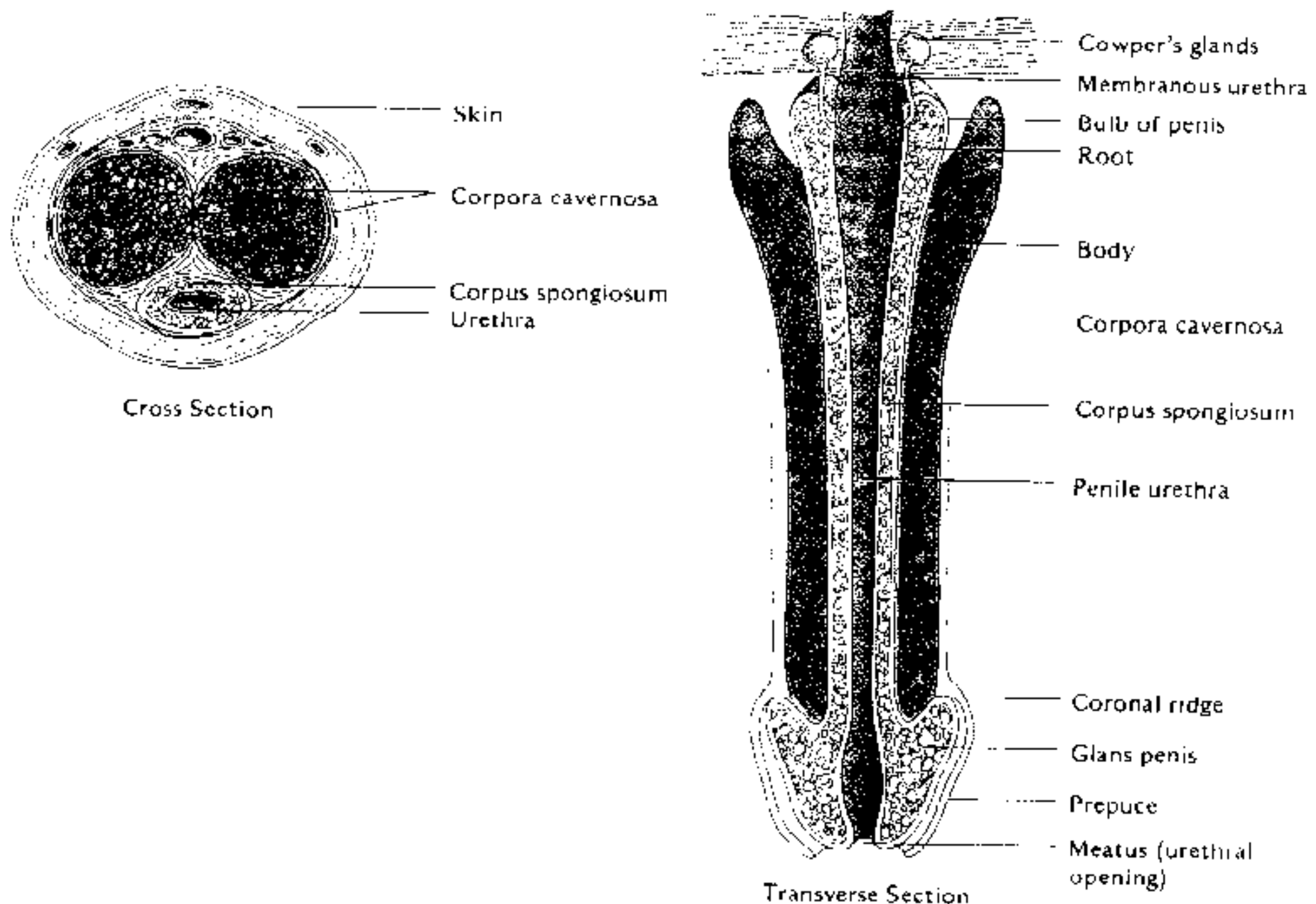


Figure 22. The internal structure of the penis as viewed from a cross section and transverse section.



It should be pointed that the presented diagrams of female and male sexual response cycles are meant only as schematic conceptualizations of commonly observed physiologic patterns, while the clinical implications of disruptions of these patterns are discussed in greater detail in the chapter of **Sexual Inadequacy**.

### **( 1 ) The excitement phase**

The most obvious sign of sexual excitement in the male is penile erection because the initial response of the human male to sexual stimulation is the vasodilation of the arteries running into the penis, resulting in erection. This occurs as a direct result of vasocongestive changes within the sponge like tissue of the penis. It is helpful to realize, however, that physical as well as psychological arousal may be present without a firm erection, particularly when anxiety or fatigue are present.

#### **Spinal cord centers**

In both men and women the physiologic signs of sexual excitement are produced by the reflex vasodilatation of the genital blood vessels. During sexual arousal, two centers in the spinal cord, one at S<sub>2</sub>, S<sub>3</sub>, and S<sub>4</sub> and one at T<sub>11</sub>, T<sub>12</sub>, L<sub>1</sub> and L<sub>2</sub>, become activated and cause the arterioles which invest the genitals to dilate. This vasodilatation causes these organs to become swollen and distended and changes their shape to adapt them to their reproductive function. The reflex dilatation occurs in both genders, however, because of anatomic differences in the male and female genitals, this swelling takes different forms and so produces changes which are different but complementary. The penis becomes hard and enlarged to penetrate the vagina while the vagina balloons and becomes wet to accommodate the erect penis.

#### **The penis**

The cavernous spaces of the corpora cavernosa of the penis fill with blood and distend the penis against its tough, rigid outer sheath. This changes the flaccid, soft penis into a hard and erect organ capable of penetrating the vagina. The penis is maintained hard and erect by a **high pressure hydraulic system** which uses blood as its fluid...

#### **Normal mechanisms of erection:**

Erection of the penis depends on the adequate filling of the paired corpora cavernosa with blood at systolic pressure or slightly above. Arterial blood enters from the paired cavernosal arteries, which are terminal branches of the internal iliac arteries. Numerous corkscrew-shaped helicine arteries branch off each cavernosal artery within the corpora and empty into the lacunar spaces. Erection occurs when the tonically contracted cavernosal and helicine arteries relax, increasing blood flow to the lacunar spaces and resulting in engorgement of the

penis. The enlargement is contained by the tough fascia which encases the penile cylinder while the pressure of the increased blood against this sheath hardens the penis and makes it rigid. The increased penile flow of blood during excitement is known to be caused by relaxation of the penile arteries; this is brought about by **parasympathetic impulses** from the erection centers.

Relaxation of the trabecular smooth muscle of the corpora cavernosa is mediated by acetylcholine released by the parasympathetic nerves. Acetylcholine acts on endothelial cells causing them to release a second non-adrenergic non-cholinergic carrier of the relaxation signal. This carrier is proved to be nitric oxide, possibly of neural origin, but other candidates for example; vasoactive intestinal polypeptide- have not been conclusively excluded. Nitric oxide may exert a relaxing effect on the trabecular smooth muscle through stimulating guanylate cyclase to produce cyclic guanosine monophosphate (c-GMP), which would then function as a second messenger.

Systemic blood pressure expands the relaxed trabecular walls against the rigid tunica albuginea, compressing the plexus of subtunical venules and restricting venous drainage from the lacunar spaces. Erection is therefore the result of an equilibrium between arterial inflow from the cavernous arteries and the resistance to blood outflow from the lacunar spaces resulting from these veno-occlusive mechanisms. Detumescence is accomplished by a reversal of these processes. Increasing sympathetic tone, which is also involved in mediating orgasm and ejaculation, causes the cavernosal and helicine arteries to contract, restricting blood flow into the lacunar spaces. Falling intralacunar pressure then decompresses the subtunical venules, allowing increased venous outflow and restoring the penis to its normal state of flaccidity. We can see now that the erectile response is **primarily a parasympathetic one**, although surgical and pharmacological evidence suggests that **minor sympathetic component** is also required for potency by controlling the outflow of erectile blood. However, it is well known clinically that an intense sympathetic response such as that produced by fear and anxiety, can instantly drain the penis of extra blood and so cause a psychogenic loss of erection.

Sexual excitement may mount rather unexpectedly and quickly especially in young men, but it may also build up gradually and over a longer period of time. In fact, some males deliberately distract themselves repeatedly from their mounting feelings of immense sexual pleasure, in order to prolong the act and to savor or enjoy more their experience of becoming sexually aroused. Again, sexual arousal especially in its early stages, can be easily reduced by some outside interference such as sudden worry or anxieties, also fear and pain have the same effect. But, with the increasing magnitude of sexual tension, such negative influences become less and less effective, while the ability for sexual self control is impaired and sexual inhibitions are swept away with the inevitable occurrence of the orgasmic release and ejaculation.

The penis is formed of three bodies of cavernous tissue with erectile capacity, and after the start of sexual stimulation whether by tactile, visual or olfactory means, there occurs a slight increase in the size of the penis which affects its shape and position. The stiffness of the penis occurs first in the paired parallel lying corpora cavernosa and not until further and stronger sexual stimulation takes place, does the corpus spongiosum which forms the glans become fully erected. The glans penis shows a color change acquiring a more deep red tone. When the penis is fully erected, the urethra is stretched out, while a droplet of fluid is seen often in the urethral opening. This fluid is secreted from the urethral glands among which is the Cowpers gland placed some 15 cms from the opening. A point of great importance is the presence of few very active sperms sometimes in this fluid, and this droplet of fluid may be noted though the penis is not fully erect, ( Fig. 23).

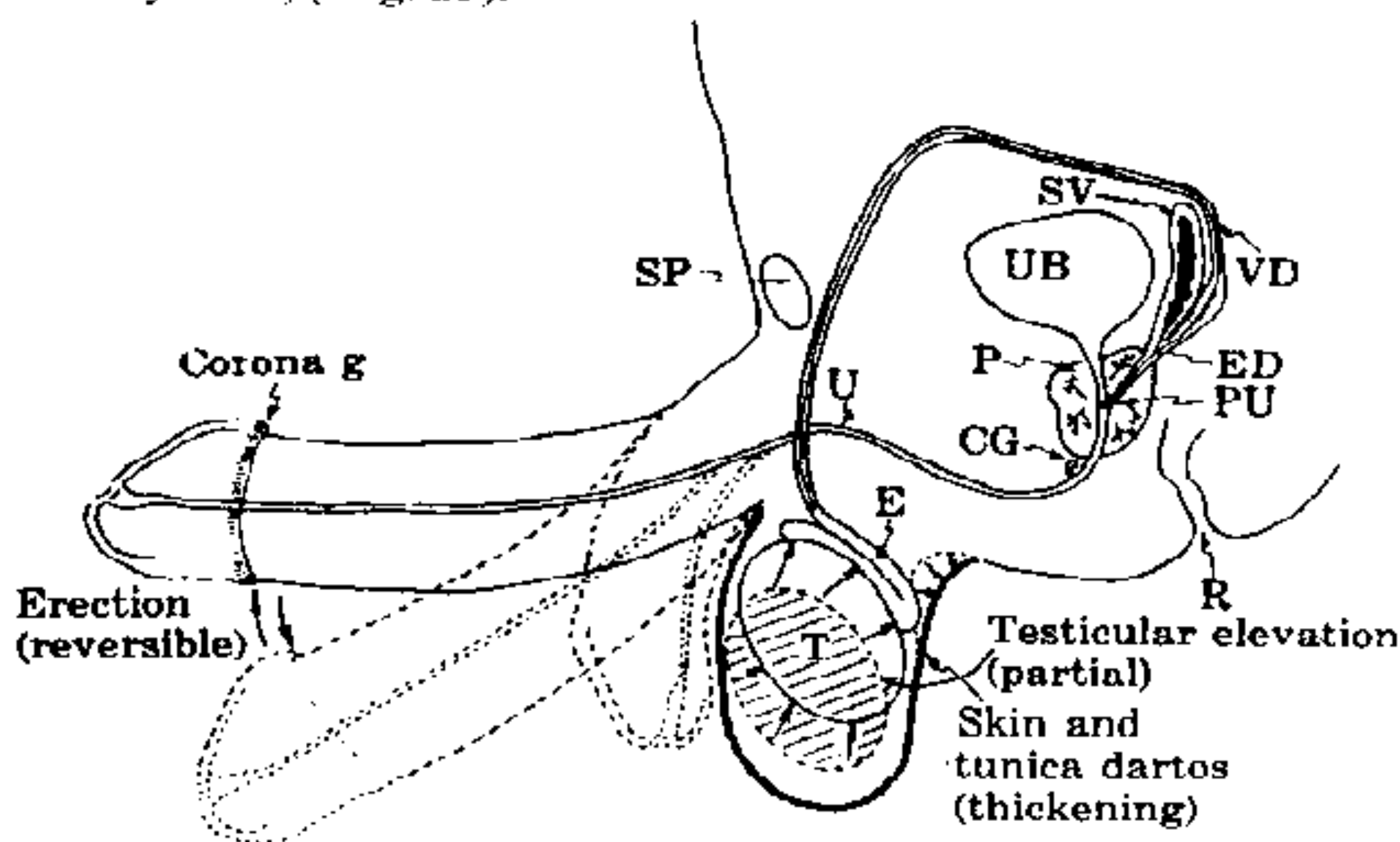


Figure 23. **Male pelvis: excitement phase.** Key to abbreviations T = testis; E = epididymis; U = urethra; CG = Cowper's gland; P = prostate; PU = prostatic utricle; ED = ejaculatory duct; VD = vas deferens; SV = seminal vesicle; UB = urinary bladder; SP = symphysis pubis; R = rectum.

### The capacity for erection

It is worth mentioning here that the same stimuli that bring about the penile erection in the male result in vaginal lubrication in the female, because these two phenomena are absolutely necessary for a normal penile intromission into the vagina and are both based upon the same physiological mechanism. The capacity for erection is present at all ages in the male, the neonate penis is dominated by the glans and experiments done on a two day old boy, proved that erection did occur when provoked by slight touching of the genital area. It should be noted again that erection in the male may be evoked by cerebral or spinal activation, because in males with high spinal cord transection, erection may be

evoked by spinal reflexes alone. The same is true of vasodilation during erection, the arterial vessels running to the corpora cavernosa are almost closed; parasympathetic cholinergic nerves innervate these blood vessels. The dilation that ensues fills the cavernous spaces with blood, the pressure rises as a result until it reaches that of the arterial blood pressure with maximal stiffness and rigidity following.

### **The scrotum**

The normal appearance of the scrotum begins to change as vasocongestion produces a smoothing out of skin ridges on the scrotal sac; the scrotum shape also flattens because of an internal thickening of the scrotal integument. Later, the scrotum and the testes are partially elevated toward the perineum. The physiological significance of this phenomenon is not completely understood, because this elevation occurs in other situations besides sexual arousal. Incidentally, it so parallels the vaginal tenting effect, well noticed in the sexually stimulated female, both have in common a preceding phasic period and a characteristic fixation in position. When the surrounding temperature is neutral, the scrotal skin is richly folded and freely movable in relation to the underlying structures. But if the temperature of the environment is lowered, the muscles of the scrotum are activated and alternate between contraction and relaxation while the testes move into a posterior position as the organ is elevated. Contraction of the cremaster muscle, known as the "**cremasteric reflex**" or "**withdrawal reflex**", may be evoked also when the inner surface of the thigh is scratched. These changes resemble those occurring during sexual arousal in the male, partial elevation of both testes toward the perineum occurs in the excitement phase. Later, when the sexual response cycle has continued into the plateau phase, the testes become enlarged by vasocongestion, increasing their size by about 50 percent. They are kept in close apposition to the perineum and lower abdomen through the shortening of the spermatic cords, mediated by the cremasteric muscles. The pulse rate in this phase reaches about 100-120 per minute as compared with the male resting pulse; ECG recordings were measured through electrodes fixed on the thorax of male volunteers. The **blood pressure rises** and there is **hyperventilation** as well as **generalized myotonia**.

### **( 2 ) The plateau phase**

In the excitement phase, there is a marked increase in sexual tension above the baseline (unaroused) levels. The plateau phase represents a leveling off of the increments in sexual tension that are occurring, although there is a further intensification if effective stimulation continues. This phase therefore describes a high degree of sexual arousal that occurs prior to reaching the threshold levels required to trigger orgasm. The duration of the plateau phase is variable, but it is often exceptionally brief in men who are premature ejaculators.



## The penis

During the plateau phase, there is a minor increase in the diameter of the proximal portion of the glans penis, where there is frequently a visible deepening in color due to venous stasis.

## The testes

Vasocongestion causes further increases in the size of testes during this phase, with increments of 50 to 100 percent of baseline size are typically seen. As sexual tension mounts towards orgasm, the testes continue not only the process of elevation initiated in the excitement phase but also a process of anterior rotation so that the posterior testicular surfaces rest in firm contact with the perineum, (Fig. 24).

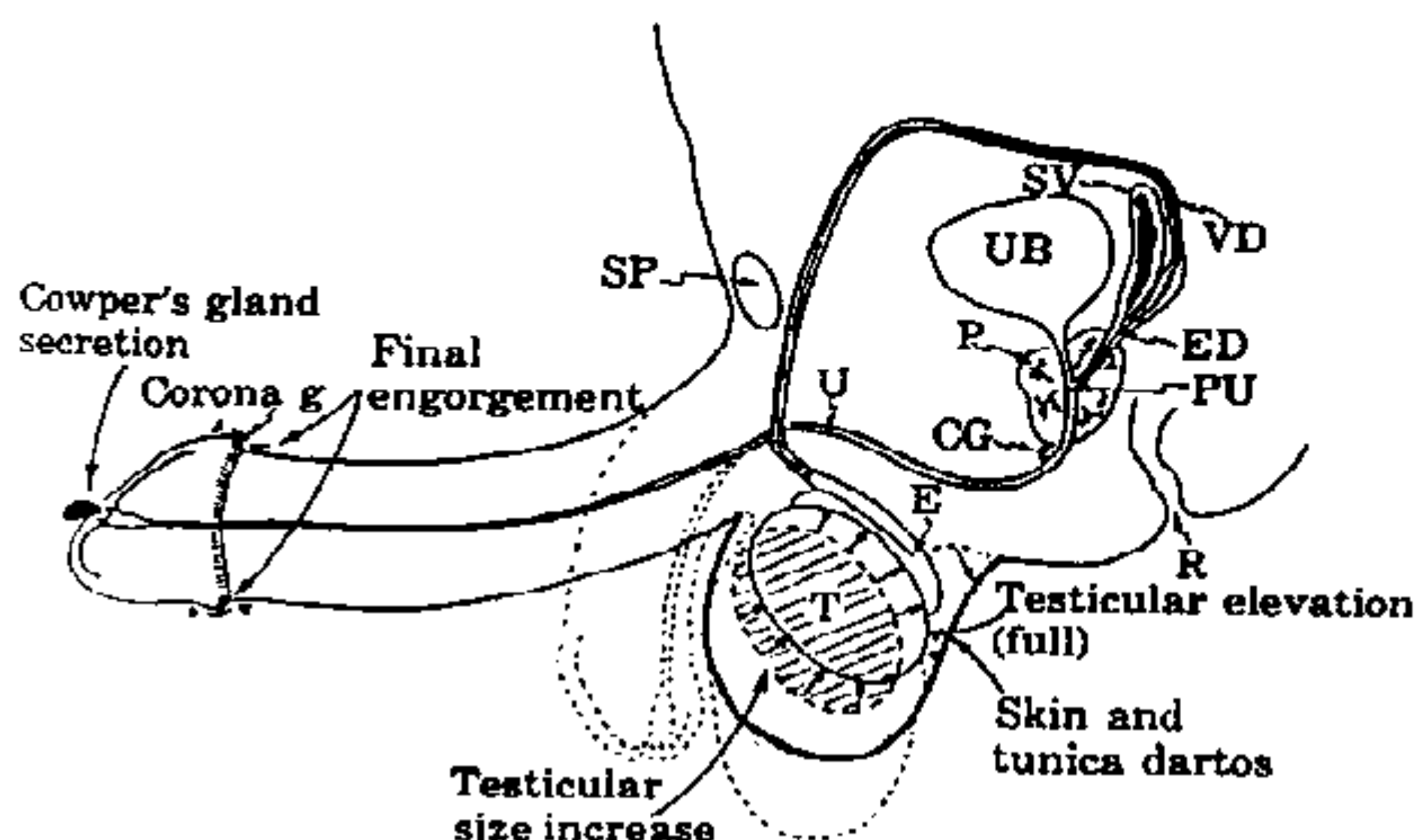


Figure 24. Male pelvis: plateau phase.

## Extragenital changes

Other extragenital features of the plateau phase common to both women and men include **generalized myotonia**, **tachycardia**, **hyperventilation**, and an **increase in blood pressure**. These changes are primarily a continuation seen often during the late plateau phase.

A number of males, not all, do experience what is known as a **sex flush**, it is a red rash that usually begins in the area of the lower abdomen and that spreads to the neck and face or even to the shoulders, arms and thighs. The sex flush may start only late in the excitement phase but it is more likely to appear in the plateau phase while sometimes it may appear as late as the orgasmic phase. In many

cases, however, there is no sex flush at all, the same is true for the human female. The physiological mechanism underlying the appearance of the sex rash, which may be of a maculo-papular character is not known up till now, and it may very quickly disappears in the resolution phase.

Not all males experience the erection of their **breast nipples**, which is brought about by direct physical stimulation of the breasts unlike females whose breast nipples become erect involuntarily once the lady is sexually stimulated. It usually appears toward the end of the excitement phase or during the plateau phase and it usually remains visible and erected for sometime after the resolution phase.

### **( 3 ) The orgasmic phase**

It is simply the sudden release of muscular and nervous tension at the climax of sexual excitement. This experience represents **"the most intense physical pleasure of which human beings are capable of and is basically the same for males and females"**. As mentioned before, the specific neurophysiologic mechanisms of orgasm are not known presently, nevertheless, it can be postulated that orgasm is triggered by a neural reflex arc once the orgasmic threshold level has been reached or exceeded. This speculative model, based on the physiology of other body systems, will be important in the context of later clinical discussion. An orgasm lasts only a few seconds and is felt very much like a short seizure or rather like a quick succession of convulsions which involve the whole body and soon lead to complete relaxation.

#### **Mechanism of ejaculation**

In sexually mature males, orgasm is accompanied by ejaculation of semen and since women do not produce semen, hence they do not ejaculate. The same is true for boys before puberty, they do have orgasms but without ejaculation. The male orgasm is triggered by the buildup of sexual tension to the point where the genital ducts and accessory sex organs begin a series of strong involuntary rhythmic contractions, namely: Vasa deferentia, seminal vesicles, prostate gland, the anterior and posterior urethra, urinary bladder sphincter, the muscles at the base of the penis and finally the penis itself. The first three or four forceful contractions recur within less than a second, actually (0.8) of a second, then they become weaker and occur at longer intervals. As a result of these contractions, the seminal fluid is pooled in the prostatic urethra forming a **pressure chamber**, with a proximal closure towards the urinary bladder. This fluid, with its concentration of live sperm cells, is formed from three different sources; the prostate, the seminal vesicles, and the vas deferens. The amount of semen ejaculated during one orgasm is usually about a teaspoonful, nearly 5 ml, but it varies especially if repeated ejaculations are performed within a short time, because the male then produces less and less seminal fluid.

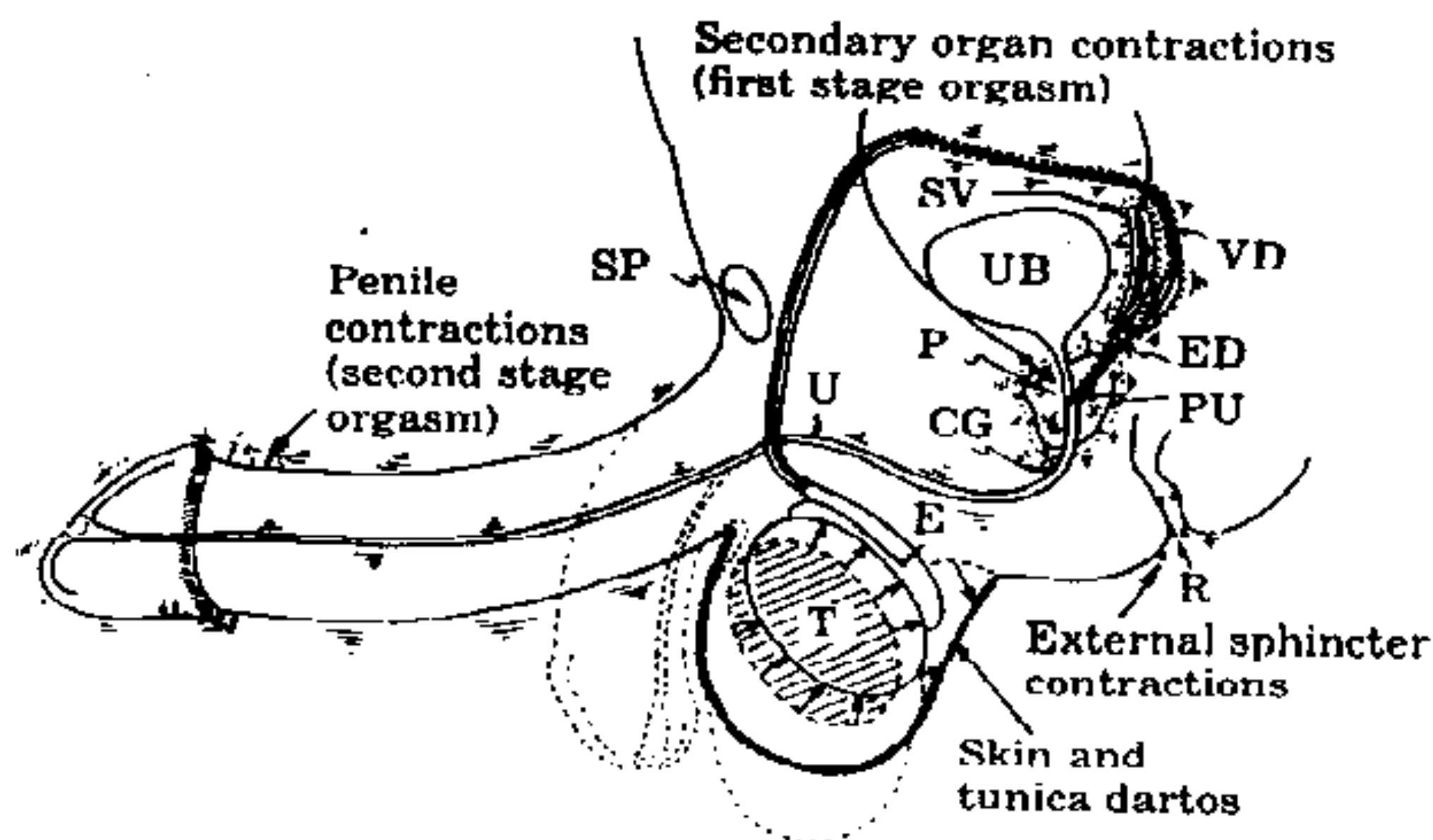


Figure 25. Male pelvis: orgasmic phase

At the first stage of the ejaculatory process, the very excited male experiences a sensation of **ejaculatory inevitability**, when the changing pressure dynamics are perceived as the start of ejaculation, although the external propulsion of semen will be delayed for several seconds. This time lag between the onset of ejaculation and appearance of seminal fluid from the penis, is a result of the distance the ejaculate must travel through the urethra, as well as the interval required for the build up of sufficient contractile pressure to push the seminal fluid pool in an anterior fashion. The internal sphincter of the neck of the urinary bladder is tightly closed during ejaculation, ensuring that the seminal fluid bolus moves anteriorly, toward the path of least resistance. Rhythmic contractions of the prostate, the perineal muscles, and the shaft of the penis combine to assist the propulsion process of ejaculation during the second stage of the orgasmic ejaculatory process (Fig. 25). The first ejaculate leaves the urethra to the outside emerging in several quick spurts, at a velocity of about 4 times the mean velocity of the blood in the aorta. At times, it may be projected a considerable distance, while at other times, the semen may flow out rather gently; the force of a particular ejaculation is not related to a man's strength or virility, (Fig. 26).

It is important to remember all the time that the whole body is involved physiologically, for example, the **anal sphincter** muscles contract at the same intervals as the sex organs. In fact, there is **great neuromuscular tension** throughout the whole body, because besides the muscles directly involved in the act of orgasmic release, whether through coitus or masturbation, almost all groups of muscles may react involuntarily, rhythmically or with single contractions. While the sexual stimulation proceeds, the restlessness increase and it is the sudden, convulsive release from this overall tension that constitutes the orgasm. As a matter of fact, at the time of sexual climax, **sounds** are often produced

whether from the male or female partner, such as screaming or moaning or incoherent noises. Sometimes tossing of the head sideways is noted among some females during this phase. **Breathing** become very fast and the **pulse rate** mounts to about 140, while the **blood pressure** rises even higher than during the plateau phase.

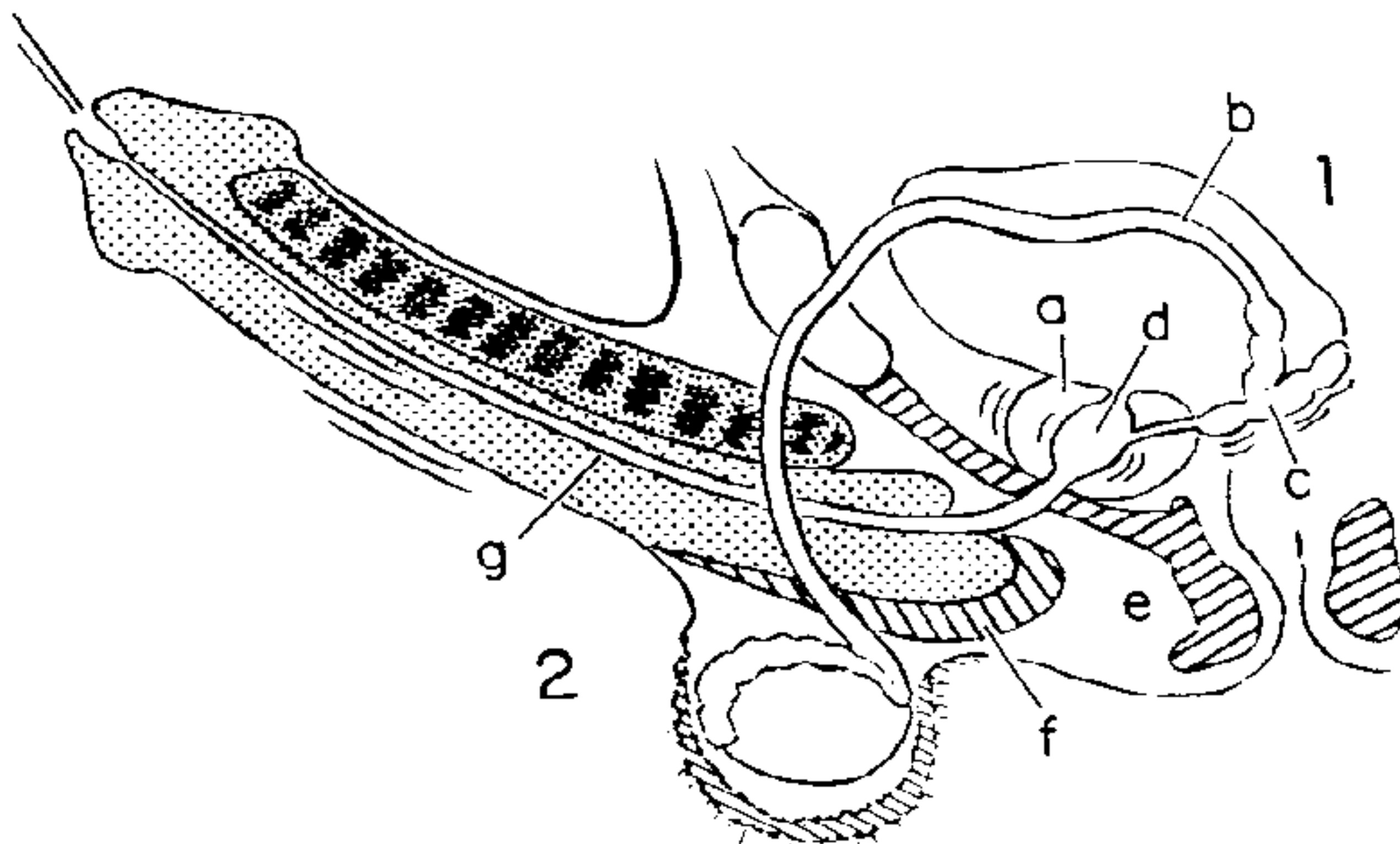


Figure 26. The male genitals and muscles during orgasm.

Phase 1- Emission: This phase is perceived as the sensation of "ejaculatory inevitability". The internal male reproductive viscera [prostate (a), vas deferens (b), seminal vesicles(c)] contract and collect the ejaculate in the urethral bulb (d). Phase 2- Expulsion: The perineal (e), and bulbocavernosus (f) muscles contract with a 8/second rhythm causing pulsations of the penis and expulsion of the ejaculate. The penile urethra (g) contracts also.

#### ( 4 ) The resolution phase

During the resolution phase, the anatomic and physiologic changes that occurred during the excitement and plateau phases reverse. Immediately following ejaculation, the man enters a "**refractory period**", during which further ejaculation is impossible, although partial or full erection may sometimes be maintained. This characteristic feature of the male resolution phase may last for a few minutes or it may last for many hours. For most men, this refractory period lengthens with age and is typically longer with each repeated ejaculation within a time span of several hours. There is great variability in the length of the refractory phase both within and between individual men, while it is not present in the female sexual response cycle. (Figure 27).



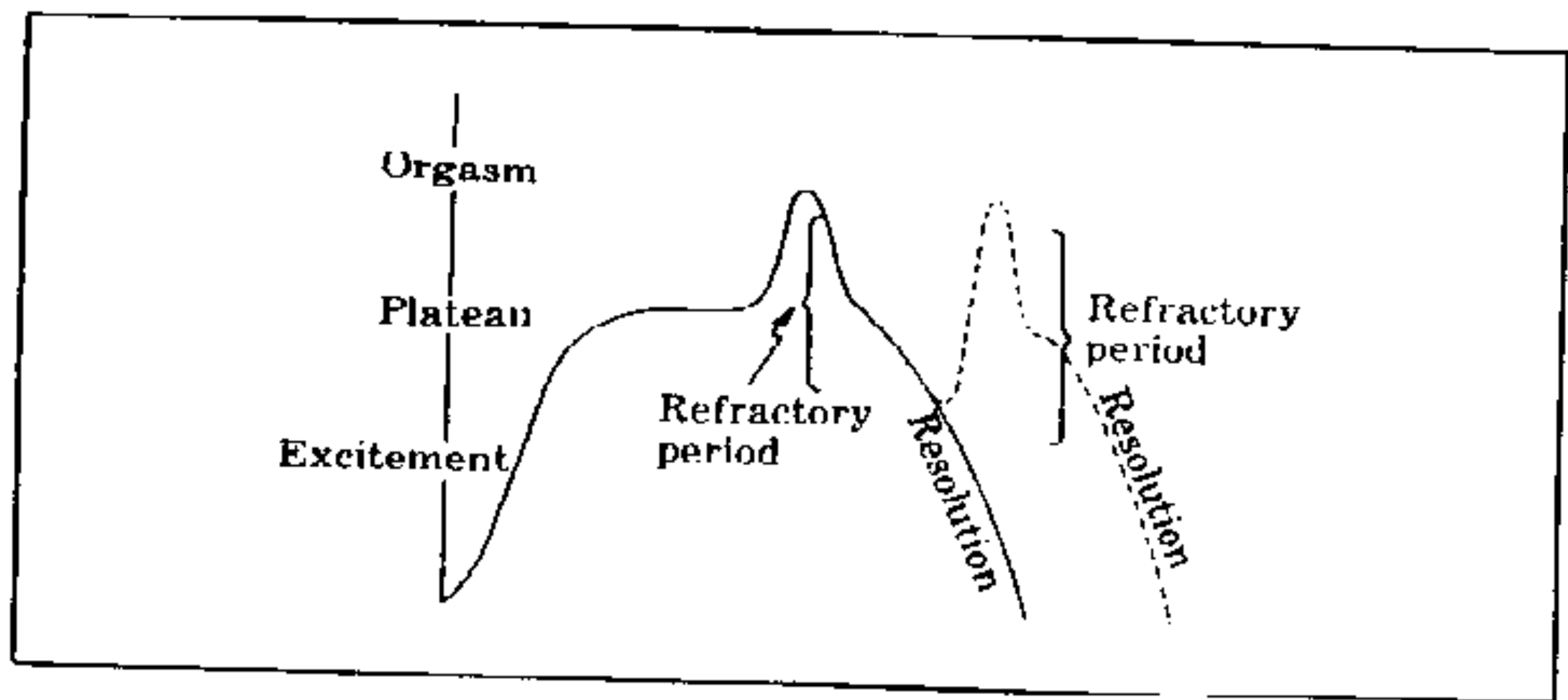


Figure 27. The male sexual response cycle.

Immediately after the last ejaculatory contraction the muscular movements cease, while the scrotal and testicular elevation reverses into a downward movement. The **testes** decrease in size and descend into the scrotum unless sexual stimulation is continued. The tumescence of the **penis** starts to decrease and incidentally the length of this resolution time is proportionate to that of the excitement phase. Thus, in men the erection diminishes in two stages: a prompt major loss of potency that occurs immediately after ejaculation due to penile contractions during orgasm that quickly reduce vasocongestion and a second stage of detumescence corresponding to a slower process of return to normal vascular flow. Thus, one can note that the penis still retains some firmness which may persist for sometime especially if the excitement and the plateau phases were prolonged. On the other hand, it is well known that non sexual activities or distraction e.g. a knock on the door for example can complete the loss of erection very rapidly, (Fig.28).

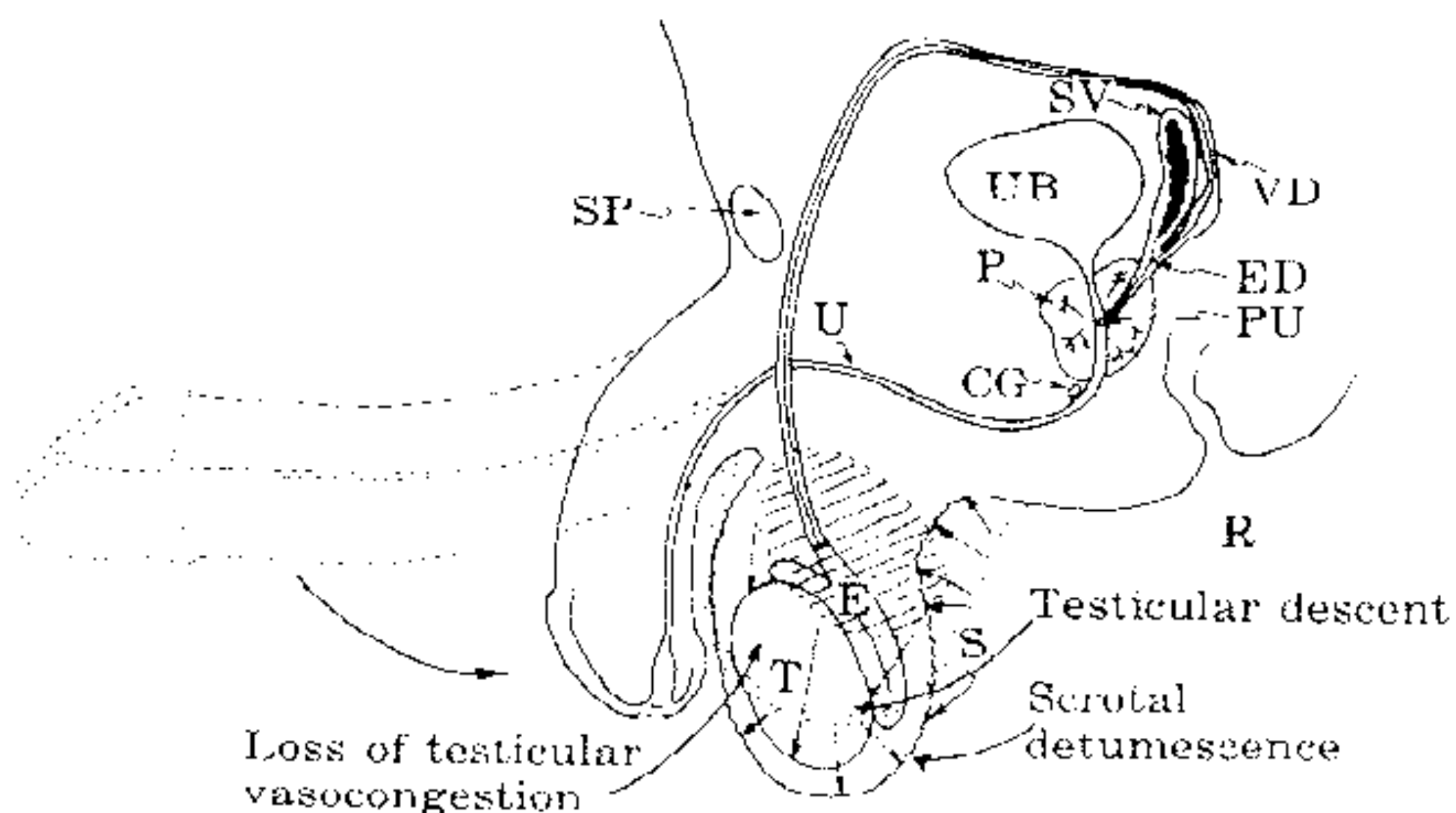


Figure 28. Male pelvis: resolution phase

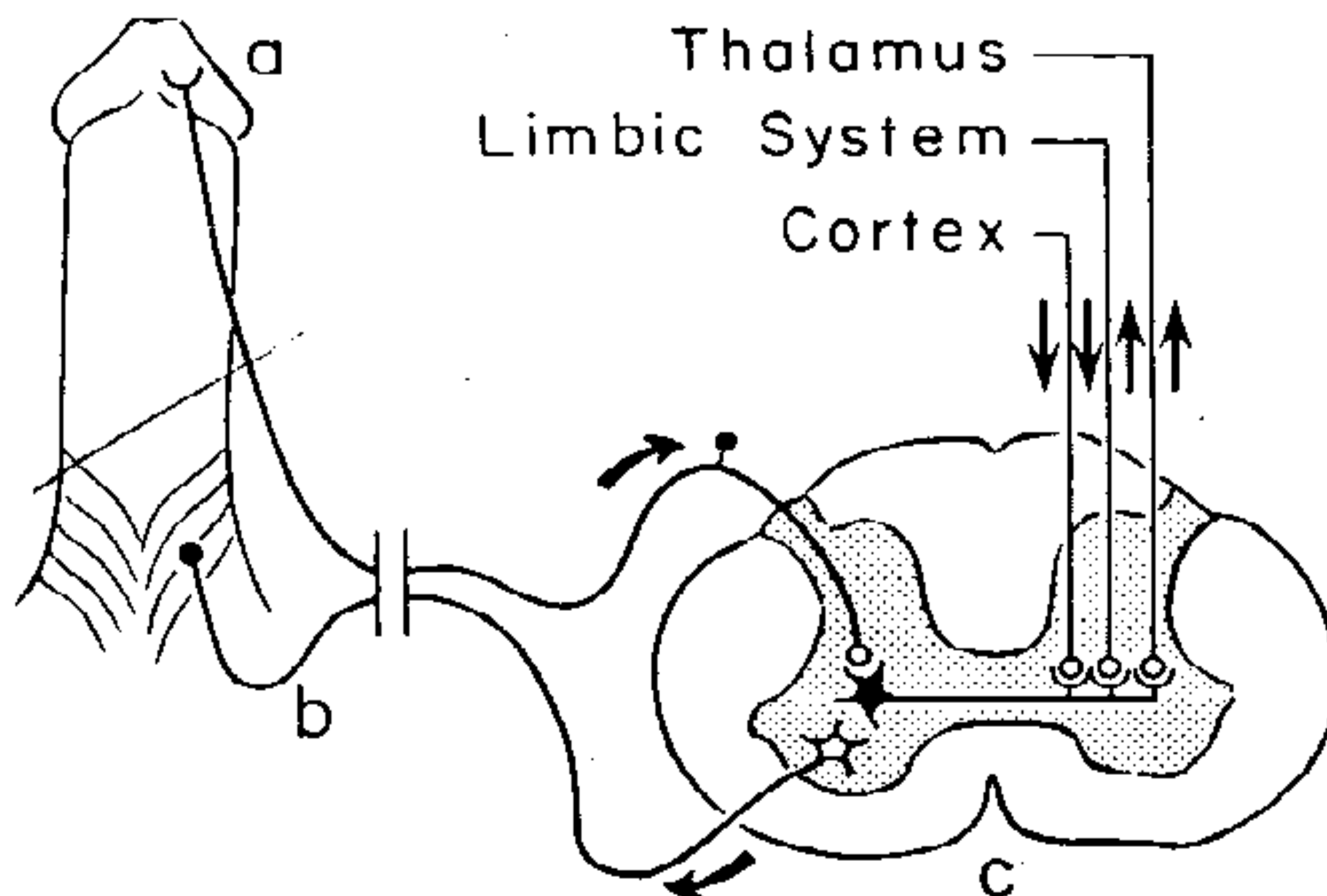


Figure 29. The sexual response reflexes.

This is a diagrammatic representation of the reflex pathway of the expulsion component of ejaculation. (a) is a representation of the sensory pathway from the glans penis; (b) shows a motor nerve to the muscles at the base of the penis which contract reflexly during orgasm; and (c) is a diagram of a cross section of the spinal cord, showing a schematic representation of the various influences which impinge on the internuncial neurone pool.

## Size of The Penis

### History

Recent discoveries in the field of experimental sexology have exploded several sexual myths and wrong beliefs about the size of the penis (Masters and Johnson). So much has been said, and a lot was written about the importance of the size of the penis and its role during coitus. In every country and in every known language, not just recently but since ages this myth was well recorded at the time of the **Pharaohs**. Their temples all over Egypt are full of phallic inscriptions and paintings, some of which are even abnormally exaggerated erections, a good example is the God of fertility (Menn), beautifully painted and well reported in Upper Egypt and in Abou-Simbel.

In "Pompeii", the old Roman town destroyed by the volcanic eruptions of the famous volcano "Vesuvius" in 79 A.D., tourists could still easily see the daring **Roman** philosophy painted clearly on the gate of the house of pleasures. A big balance, with one scale full of all the world's known treasures but still not capable of tipping the other scale which contained the image of an enormous sized fully erect penis....

In some ancient temples of **India, China and Japan** and among the text of some of their numerous religions, there were similar erotic ideas and sexual beliefs. So much so, that their ancient civilizations have confirmed the widely held belief that the size of the erect penis is related to sexual efficiency and it greatly influences the sexual performance in coitus. Many famous and sexually explicit works of art and architecture testify to this belief, indeed, one of the best known early sex manuals, the "**Kamasutra**" written in the 2nd century B.C. treats sexual intercourse as a means of spiritual enrichment. Phallic worship in the form of deep respect for the "**Lingam**" an artistic representation of the penis, continues to this day.

In many parts of Asia, openly erotic images acquired a religious meaning in the past, a mingling of the so-called "**tantric movements**" which can be found in both the "**Hinduism**" and "**Buddhism**" religions. Highly erotic images can be seen in many Hindu temples, for example, the "**lingam**" (male sex organ) set in the "**Yoni**" (female sex organ), representing the double sexed deity or their God who is double sexed!. (so they believed)..

### **Sexual performance and size of the penis**

For reasons that are not entirely clear, many males in our culture seem quite concerned about the size of their penises, however, such concern is completely unwarranted sometimes. The average normal length of the penis in the flaccid state is variable, it is usually about 3 to 4 inches but when fully erect the length increases by approximately 50 percent, reaching from 5 to 7 inches or more however, it should be noted that this increase in length occurs stepwise. It has been found that there may be great variations in the size of the penis from one individual to the other. Contrary to some widely accepted myths, the size of the penis is not related to a man's body build, skin color or his sexual power. For example, a very short man may have a larger penis than a tall man (and vice versa), a white man may have a larger penis than a black man (and vice versa), and a man with a small penis may have more orgasms than a man with a large penis (and vice versa). Furthermore, some penises which greatly differ in size when they are flaccid, may be of identical size when they are erect. Even a penis that remains relatively small during an erection serves every function of a larger penis. A woman's vagina for instance, adjusts to any penis, no matter what its size and since the vaginal walls contain few or no nerve endings in its inner two thirds, any difference in the woman's sensations depends on the firmness of her muscles surrounding the outer vaginal walls as well as many psychological factors. This fact, anatomically is also true, and holds good as regards sensations inside the rectum, during anal intercourse or sodomy. There is practically no feelings at all beyond the anal sphincter muscles, this is incidentally the reason why some individuals who introduce long and hard objects into the rectum, may seriously hurt themselves without realizing it. This may happen as well during forcible anal intercourse which occurs during the act of raping a male e.g. in prisons and mental hospitals or between homosexuals. The manufacturers of sexual aids did make use of the huge penis sexual taboo and produced in the

market different sized and variable shaped phallic like structures to attract their customers, which were meant for both males and females. A famous theatrical play which deals with this point was performed in London, (1960).

### **Abnormal sized penis**

Recently, the laboratory experiments performed by Masters and his colleagues proved that the differences in size of the penis are to a very large degree leveled out by the degree of erection, so much so, that a smaller penis increasing in length impressively, is more efficient than a larger non efficient one provided naturally that it is not the congenital anomaly of a microphallus ...!. Because, the human vagina accommodates the actual penile size and no more, so that an abnormal sized penis could not go further than the actual size of the vagina when stretched maximally during the various stages of sex stimulation. Furthermore, there is danger of vaginal rupture or tears commonly occurring in the posterior fornix, if an abnormally sized penis is pushed wrongly deeper than necessary or while being used with undue force. Post coital bleeding, apart from torn hymen injuries on the wedding night, accompanied with excessive pain or unexplained shock should be taken seriously into consideration by doctors in such cases, because if there is a vaginal tear it requires immediate surgical intervention and repair under general anaesthesia.



## **Relation Between Anger and Sexual Physiological Responses**

<b>Sexual Response</b>	<b>Anger Response</b>
1. Reduced sensory perception.	Reduced sensory perception.
2. Pupil dilatation.	Pupil dilatation.
3. Involuntary vocalization.	Involuntary vocalization.
4. Salivary secretion.	Salivary secretion.
5. Hyperventilation.	Hyperventilation.
6. Irregular breathing.	Irregular breathing.
7. Increased blood pressure.	Increased blood pressure.
8. Increased pulse rate.	Increased pulse rate.
9. Increased peripheral circulation.	Increased peripheral circulation.
10. Reduced bleeding.	Reduced bleeding.
11. Inhibited gastric function.	Inhibited gastric function.
12. Adrenaline secretion.	Adrenaline secretion.
13. Rhythmic muscular movement.	None.
14. Tumescence of sex organs.	None.
15. Genital secretion and discharge	None.
16. Ejaculation in adult males.	None.
17. Muscular tension.	Muscular tension.
18. Increased muscular capacity.	Increased muscular capacity.
19. Involuntary muscular activity.	Involuntary muscular activity.

Kinsey discovered that many of the bodily responses in anger and during sexual arousal were in many aspects similar. Freudian analysts in particular argued that anger, both concealed and expressed, was often the result of repressed sexuality. Kinsey showed that there is certainly a close parallel between sexual response and the physiology of anger. Only four bodily functions differentiate between both and so he put the hypothesis that, if certain physiological elements were prevented from developing, the individual might be left in a state of anger. As such, the fact that frustrated sexual responses so readily turn into anger could be easily explained.

As Kinsey pointed out, in lower mammals and in man, anger and fighting easily turn into sexual response !. Could this be the clue and the answer to the mysterious "hate-love relationship" ?

## Orgasm during Sleep

It has always been well known that human beings are capable of experiencing sexual responses while they are asleep. In the past, people ascribed this capacity only to males and there was no comparable requirement for women. Since women do not ejaculate anything, nobody paid any attention to their spontaneous orgasms. Indeed, until fairly recently the medical staff were used to discuss it under the heading of "**nocturnal emission**".

### History

In ancient times, it was thought that involuntary orgasms occurred during the night when a demon visited people in their sleep!. During the middle ages, it was believed that the devil himself could seduce good believers at night by appearing as an **incubus** (i.e. lying upon a woman) or a **succubus** (i.e. lying under a man)...

### Terminology

It was not until around the middle of our century that Kinsey and his associates presented some reliable statistics as to the frequency of this type of sexual outlet. The figures showed that not only males, but also many females have orgasms in their sleep, (although the percentage of females is smaller). As a consequence, Kinsey no longer spoke of "**nocturnal emissions**", but of "**nocturnal sex dreams**". This was a term that could be applied to both sexes. However, it also covered cases where no orgasm was reached. In order to be more precise, other sex researchers therefore replaced Kinsey's term with "**nocturnal orgasm**", (i.e. orgasm during the night). Unfortunately, this now popular expression is very misleading, because in our culture most orgasms occur at night, including those reached by coitus. Sexual dreams on the other hand, may very well occur during an afternoon nap, in which case they would have to be called "**diurnal sex dreams**", (i.e. sex dreams during the day). It seems then that "**orgasm during sleep**" is the simplest and most accurate term available, it was also termed "wet dreams" in the past.

Involuntary orgasms are almost always accompanied by sexual dreams, especially in males. These dreams may depict unusual or forbidden behavior, such as sexual intercourse with close relatives, children or animals, group sex, exhibitionism, and many other activities that the individual could never perform or contemplate while in his or her waking hours. However, during sleep our normal inhibitions and learned controls are much less effective and many of our unconscious wishes may thus be acted out in a harmless symbolic fashion. The lack of conscious restraints also accounts for another phenomenon, and that is many people, (particularly women) reach orgasm much faster in their sleep than while they are awake.

## **Medical opinion**

Certain psychiatrists once used to regard involuntary orgasms in women as symptoms of some neurotic disorder, but in due time, this curious opinion has been completely discarded. Instead, there is now a widespread belief that orgasms during sleep are necessary and healthy, and that they can even provide a "natural" compensation for sexual abstinence. In other words, it is assumed that persons who do not engage in any sexual activity will instead find sexual relief while asleep. This popular assumption seems to be false however. For instance, according to Kinsey's findings women who suddenly lost the opportunity for several coital orgasms per week, has only a few more orgasms in their sleep per year.. As a matter of fact, for some women the number of involuntary orgasms increased only when they also had more voluntary orgasms. In short, an orgasm during sleep is a possible natural function of human body, but it is no substitute for conscious sexual activity.

# 6

## **POSITIONS OF SEXUAL INTERCOURSE**

- **History and Research.**
- **Advantages and Disadvantages.**



# POSITIONS OF SEXUAL INTERCOURSE

## History

In Western societies in the past only one sexual position was considered "normal" for decent people. Because of the religious sanction it received, it has come to be referred to as the **"missionary position"**. Kinsey's research found that the male-above position was the most frequently practiced among Americans born before 1930 (Kinsey et al. 1953). A small proportion of couples (9 percent) never even strayed from it in their lifetimes. However, most couples did practice some variations in their sexual positions especially those who were brought up more recently, mostly young and uninhibited couples.

## Research

A recent national American sex survey found evidence that since the time of Kinsey's research, variation in sexual positions has become common practice between marriage partners (Hunt, 1974). The research found that the **"female-above position"** is frequently being used by 75 percent of married couples nowadays (versus only 45 percent in Kinsey's research). A **"side-to-side position"** is frequently used by 50 percent of married couples (versus only 31 percent in Kinsey's research). The **"rear-entry position"** is frequently used by 40 percent of married couples (versus only 15 percent in Kinsey's research). Finally, a **"sitting position"** is frequently used by 25 percent of married couples (versus only 9 percent in Kinsey's research ). Frequent variation in sexual positions is found to be most common among younger couples.

Research studies of male and female attitudes toward different sexual positions is virtually non existent. One recent study, however, did investigate attitudes toward the female-above position in a sample of 119 unmarried college students (Allgeier and Fogel, 1978). Half of the students were shown slides of a couple having sexual intercourse in the female-above position and the other half were shown slides of a couple having sexual intercourse in the more conventional female-below position. All the students were then asked to give their impressions of the personalities of the man and woman using a scale of descriptive adjectives. Surprisingly, the research found that the female students (but not the male students) rated both the man and woman in the female-above position quite negatively. Specifically, the female students regarded the woman as **"dirtier, less respectable, less moral, less good, less desirable as a wife and mother"**, when she was above the man during sexual intercourse. The female students rated the man in the female-above position in a similarly negative way.. This research seems to indicate that young unmarried women as compared with men tend to hold more traditional erotic role expectations regarding positions of sexual intercourse. Negative emotional responses to the female-above position may reflect the reluctance of women to accept a role of sexual assertiveness. That position allows the woman a greater control over the pacing of her own sexual

arousal. It is possible, of course, that such a clear-cut difference between the opinion of men and women might not have been found if the research had been done with married couples instead of the 119 unmarried college students.

Men may still be more interested than women in varying their sexual activity and coital positions. A questionnaire study of 40,000 men found that 65 percent of the men were not satisfied with the amount of sexual experimentation which they experienced (Travis, 1978 ) i.e. they wanted more variations.

## **Position variations**

Much too much importance can be attributed to positions for sexual intercourse. An over-concern about coital positions can easily result in a minimization of sexual foreplay or precoital petting.

There are hundreds of possible positions for intercourse. However, as a practical matter, the positions found to be most pleasurable for continual pursuit are those which are: (1) Comfortable and relaxing, (2) Do not cause muscular strain, and (3) Enable a reasonable freedom of movement (Masters and Johnson, 1966). Choice of position is also affected by a couple's body size and weight as well as their athletic ability at the end of a tiring day's work. Each position has certain practical advantages and disadvantages. In addition, each offers somewhat different kinds of sensations of bodily movement and touch.

## **Advantages and disadvantages**

The most common position for sexual intercourse among Americans as well as among most other people is the **"face-to-face"**, **"man-above position"** (Ford and Beach, 1951) (Fig. 30). This may be because it is convenient and relaxing especially for the woman. It also allows for some possibilities of manual and oral caressing while offering a maximum of body contact. The **"face-to-face"** relationship facilitates communication and easily observed expressions of pleasure providing a greater sense of intimacy. Finally, it may provide greater friction to the clitoris than is possible in some other sexual positions. On the other hand, this position presents difficulties for some people. It may present difficulties for people who are very obese, or for women in the last stages of pregnancy. It also may not be sufficiently relaxing for some men who ejaculate too quickly. The muscular tension needed to balance and move the man and the considerable body contact with the body of the woman can provoke premature ejaculation in some males.

There are numerous variations of the **"man-above position"**. Instead of resting her legs straight or holding open at the sides, a woman can rest her legs on her partner's shoulders by folding them upward so that her thighs rest on her stomach.

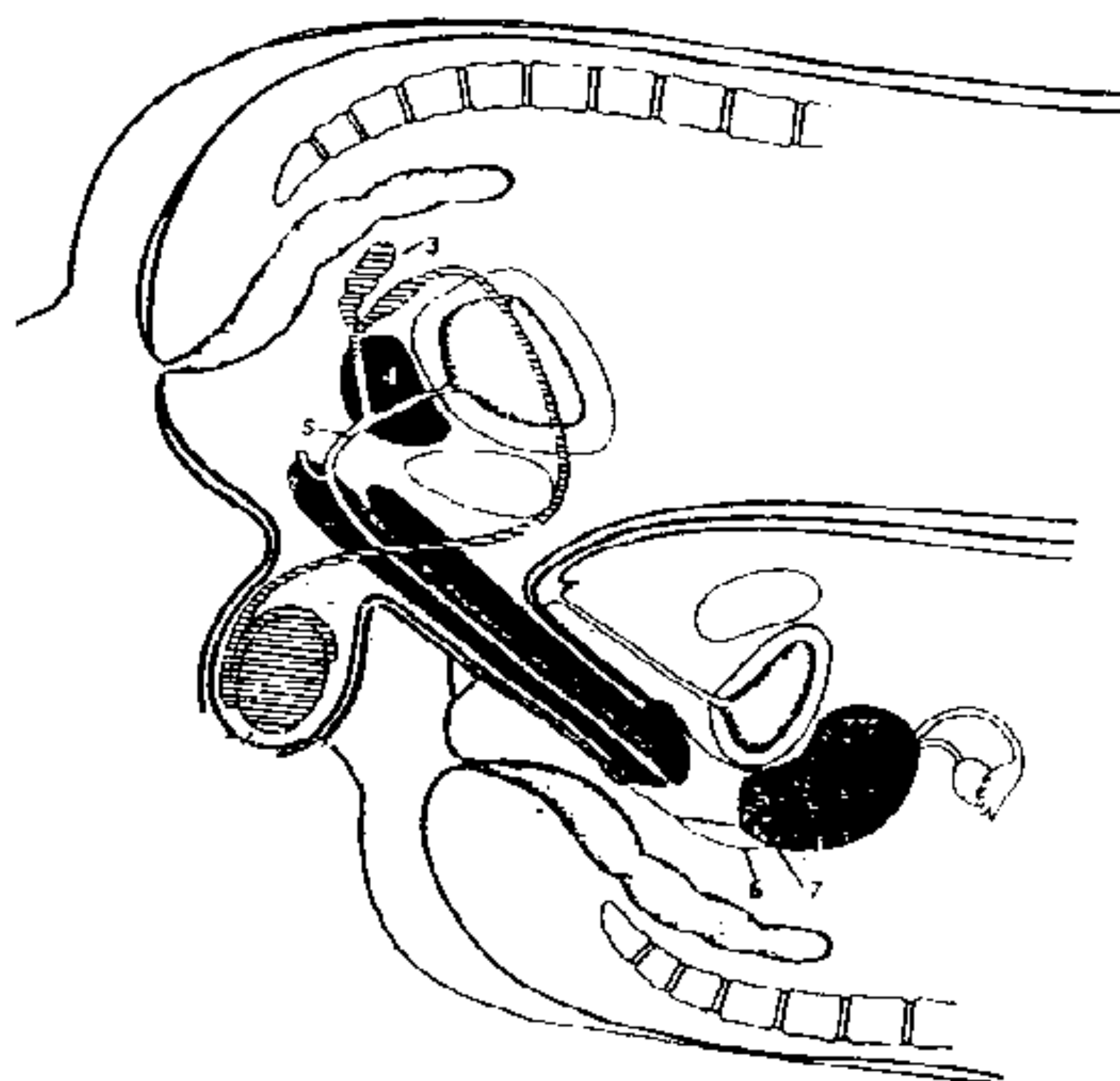


Figure 30. Coitus in lithotomy position (face to face, man above). The illustration shows the path of the sperm cells from the testicle through the vas deferens. At the end of this journey they are ready to be released through sexual activity. During coitus, the available sperm cells enter the prostate gland where they become part of the semen which is ejaculated into the vagina close to the cervix.

1. Testicle
2. Vas deferens
3. Seminal vesicle
4. Prostate
5. Urethra
6. Seminal pool
7. Cervix

N.B. Note the position of the cervix and the seminal pool.

This can offer variation in feelings of skin contact and motion. Another alternative is for the man to kneel between the woman's legs, holding her buttocks and bringing her to him for adequate support. This position incidentally, is the one which is most common in many Pacific island societies (Ford and Beach, 1951).

A "sitting position" involves the use of a chair without arms. With one partner resting against the back of the chair for support, the couple can have intercourse seated face-to-face with their legs overlapping the sides of the chair. In this position, the couple's hands are free for caressing while they are also able to kiss. Penile penetration in this "sitting position" is deep, and there is considerable skin contact in the genital area. However, the deep penetration may be painful for some women if their partner's penis bumps against their cervix.

The most common alternative to the "missionary position", i.e. lithotomy position is one in which the couple are "face-to-face", "with the woman above". This position offers advantages similar to the missionary position but is more relaxing for the man. He can lie back comfortably exerting little energy to

maintain himself in that position and use his hands to caress his partner's body. In so doing, he can concentrate more easily on his own sensations. It may also offer certain advantages to a woman. If her partner is exceptionally heavy, this position literally takes the weight off of her. In addition, she can more easily regulate the pace of movement toward orgasm in rhythm with her own build up of sexual sensations. Finally, it may be very useful for a couple in which the man tends to ejaculate too quickly. The man's relaxed position as such is less likely to promote rapid ejaculation. It is for this reason that the woman-above position is often counseled and advised strongly in cases of frequent premature ejaculation.

The woman-above position also has certain disadvantages, it is more fatiguing for the woman especially for fragile females. She may have to kneel in a position which causes muscular strain in her thighs. In addition, where there is vigorous movements with deep penetration in this position, some women find that it is internally discomforting or even painful especially with strong pelvic thrusting.

The most common arrangement for the "woman-above position" is for the woman to kneel astride her husband's hips and squat down on his erect penis. She can then use her kneeling legs to move herself up and down according to her desire. Her husband can make her more comfortable and relieve some of the strain by holding her by the waist to assist her up and down movements. There are numerous variations of the "woman-above position". The woman can lie flat on top of her partner but unfortunately, movements in such a position may be difficult. She may have to use her elbows as a balance point to create movement, or her partner may have to move her with his arms. A more unusual variation is for the woman to squat above her partner but face toward his legs. Such a position offers less friction to the clitoris unless it is provided manually. It is also less psychologically intimate because the man faces his partner's back and buttocks.

The final set of variations are "**rear-entry positions**". One arrangement is for both partners to kneel with the man behind the woman and between her legs. This position provides the man with considerable freedom to move his hands in caressing his partner's body. It also provides the man with a full-bodied feeling of motion during the thrusting movements of intercourse (This increases stimulation to the **kinesthetic sense** - the sense of body movement). In addition, the soft pressure of his partner's buttocks against his whole genital region may provide exciting tactile stimulation.

Unfortunately, the "rear-entry position" does not offer many advantages for women. Friction to the clitoris may be inadequate and may have to be provided manually during intercourse. Body contact for her is minimal and possibilities of active participation are limited to mere thrusting backward movement. The deep penetration for some women may result in discomfort or even pain. Finally, such a position may not provide a sense of intimacy for a couple because partners are unable to view each other's facial expressions. This position is perhaps, the most tabooed in American culture because it attributes symbolic associations with animal sexual behavior as well as a possible degradation of women...



A variation of the "rear-entry position" is a sitting arrangement. The man can sit in a chair or on the edge of the bed with his wife seated on his lap, her back toward him. He is free to move his hands and manually caressing her, however, genital movement in this position is difficult. A variation of the "rear-entry position", for the more athletic, is a partial standing arrangement. The woman stands and bends the upper part of her body at the hips, grasping the back of a chair or some other support for her balance. The man stands behind her, holding her by her waist for balance. Such a position can be very difficult to manage if the sizes and body shapes of the couple are inappropriate for it.

Such variable positions are for most people only considered as a rare amusement, when circumstances and mood permit some good humored sex play. There are a great many other possible positions for sexual intercourse. However, the basic patterns have been described here and others are simply modifications of them.

Another set of variations are "**side-to-side positions**". A couple may have intercourse lying on their sides and facing each other. The woman can raise her upper leg and rest it across her husband's hip enabling him to enter her vagina. In this position, both partners are free to use their hands and mouth in caressing each other. In this position, also, it is easy for a couple to maintain their contact after orgasm as they fall asleep.

Yet the "side-to-side position" also presents some difficulties. It may be very difficult to manage if the body shapes of a couple are inappropriate for it e.g. obesity. In addition, such a position does not allow for vigorous genital movement because the couple's bodies are nearly locked into a constricted position.

An alternative "side-to-side position" is one in which the man lies on his side facing the woman's back. This position is perhaps, the one which is most relaxing for a couple. It is a variation particularly appropriate for times when a couple are very tired or on sleepy mornings or when there is mild illness or during pregnancy. However, in cases where one, or both of a couple are obese this position may be very difficult to manage. In addition, while this position enables the man to have a maximum of possibilities for manually caressing his wife, she is left with few possibilities for active sexual participation. If manual caressing is not provided, she may feel little sensuous contact and inadequate friction to her clitoris.

### **Religious view**

There is nothing more instructive and reliable than the beautiful meaning, a couple would benefit from and make use of following this holy statement out of the Kôran; namely, the feasibility of any desired sexual position, and at any time they like provided it is vaginal intercourse and preceded by sexual foreplay.

قال الله تعالى في القرآن الكريم - سورة البقرة آية: ٢٢٣ .  
أعوذ بالله من الشيطان الرجيم ، بسم الله الرحمن الرحيم :  
تَسَاوَكُمْ حَرَثَ لَكُمْ فَاتُوا حَرْثَكُمْ أَنِي شِئْتُمْ وَقَدِمُوا لَأَنْفُسِكُمْ". (التفسير لابن كثير).

### **Coitus during pregnancy**

It is worth mentioning here that there is no reason that a couple should refrain from coitus in the first three months of pregnancy provided that the pregnancy is normal and the couple apply the proper pregnant sex position and without due force or pressure. The same holds good for the next three months of gestation, since the obstetrician should be the judge all the time especially in the last months of pregnancy and during lactation, providing vital advise as regards possible contraception as well.

# 7

## **MALE SEXUAL INADEQUACY (DYSFUNCTIONS)**

- **Impotency.**
- **Premature Ejaculation.**
- **Ejaculatory Incompetence.**
- **Mixed Sexual Dysfunctions.**

# SEXUAL INADEQUACY

## Terminology

Some men and women are restricted in their sexual activity by physical malformations, handicaps, diseases or injuries and there are also physically healthy individuals who cannot fully enjoy sexual intercourse because their sexual responses have become weakened, inhibited or even completely blocked for psychological reasons. Today, such a person is usually said to suffer from **sexual dysfunction** or **sexual inadequacy**.

Obviously, the distinction between physical and psychological causes of sexual dysfunction is to a certain extent arbitrary, since body and mind are so closely interrelated that a sharp dividing line between them cannot be drawn. Furthermore, it may be an oversimplification to speak of sexual inadequacy in any individual, because as a rule, it manifests itself only in relation to another individual. Indeed, in many cases it may be useful to speak of an inadequate sexual relationship between two persons. Consequently, sex therapists today insist on treating both partners together. It has recently been estimated that in more than half of all American marriages at least one partner suffers from some form of sexual inadequacy; I wonder how many are in Egypt?... Curiously enough, sexual misery seems to be widespread and while one can argue about precise figures, the importance of the problem is no longer in doubt all over the world...

## History

In the past, a man's sexual dysfunction was often ascribed to witchcraft or some evil curse!, in Arabic it is termed **Marboot!!** (if he was believed to be innocent) or to **degeneracy, self-abuse, immorality** and **excess**, (if he was held responsible for his condition). Today, we have learned however, that both kinds of explanation are false and that the real causes be elsewhere. In fact, people may become sexually inadequate mainly because of a very rigid upbringing, traumatic sexual experiences, ignorance about sex, narrow religious beliefs and bad advice from ill informed professionals, such as marriage counselors, doctors, sometimes psychotherapists and teachers or even parents...

It seems that sexual dysfunctions of one kind or another have plagued many people in many societies since the dawn of history. We know for example, that ancient and medieval physicians studied the problem and sought various medical remedies. However, it also seems that these dysfunctions have become more severe and widespread in modern times. In the 19th and 20th centuries, they were often treated by psychiatrists and the rate of cure was not always encouraging?. Today, we can see that this could hardly have been otherwise, since the physiological processes involved in sexual functioning were still poorly understood. Masters and Johnson approached sexual dysfunctions directly, instead of treating them as symptoms of something else; they also pioneered the male-female "dual team" of therapists and treated couples rather than individuals.



Sexual function involves the activation of a variety of inborn reflex responses that are ordinarily integrated into a psychological matrix. The basic physiologic mechanisms of normal sexual function may be impaired by a variety of factors of organic or psychogenic origin. An understanding of these conditions is facilitated by a classification presented by Masters and Kolodny; it distinguishes sexual dysfunctions (**marked by impaired physiologic response**) from other sexual problems (**marked by alterations or conflicts in behavior, attitude, or feelings**), but not accompanied by impaired sexual function in a physiologic sense. To be sure, sexual problems - such as guilt about participation in sexual activity- may lead to subsequent sexual dysfunction; and sexual dysfunction - such as impotence- may create ancillary sexual problems.

## **Male Sexual Dysfunctions**

The two well-known categories of male sexual dysfunction, namely, disorders of erection and disturbances of ejaculation are considered from the viewpoints of etiology, diagnosis and treatment.

### **Impotency**

The term "**impotency**" literally lack of power, from Latin **impotens**; **powerless**, is the inability to obtain or maintain an erection of sufficient firmness to permit coitus to be initiated or completed. Impotence may be classified as either **primary** or **secondary**. The male with primary impotence has never been able to have intercourse, whereas the male with secondary impotence is experiencing erectile dysfunction after a previous period of normal function. Isolated, transient episodes of inability to obtain or maintain an erection (**transient impotency**) are normal occurrences that do not warrant diagnostic evaluation or treatment. Such erectile failure is usually attributable sometimes to fatigue, distraction, inebriation ( drunken ), acute illness or transient anxiety. However, a persistent pattern of impaired erectile function is indicative of the presence of a sexual dysfunction that requires diagnostic and therapeutic attention.

### **Etiology**

In the past it was believed that approximately 10 to 15 percent of men affected by impotence appear to have a primarily organic basis for their sexual dysfunction, this percentage has risen to nearly 40% or 50% nowadays. The most common organic causes of impotence are listed in the following table.

## Physical Causes of Secondary Impotence (Organic)

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### **(1) Anatomic Causes:**

Congenital deformities.  
Hydrocele.  
Testicular fibrosis.

### **(2) Cardiorespiratory Causes:**

Angina pectoris.  
Coronary insufficiency.  
Emphysema.  
Myocardial infarction.  
Pulmonary insufficiency.  
Rheumatic fever.

### **(3) Drug Ingestion:**

Addictive drugs.  
Alcohol.  
Alpha-methyldopa.  
Amphetamines.  
Antiandrogens (cyproterone acetate).  
Atropine.  
Barbiturates.  
Chlordiazepoxide.  
Chlorprothixene.  
Cimetidine.  
Clofibrate.  
Clonidine.  
Digitalis (rarely).  
Guanethidine.  
Imipramine.  
Marihuana.  
Methanthline bromide.  
Monoamine oxidase inhibitors.  
Nicotine (rarely).  
Phenothiazines.  
Propranolol.  
Reserpine.  
Spironolactone.  
Thiazide diuretics.  
Thioridazine.

### **(4) Endocrine Causes:**

Acromegaly.  
Addison's disease.  
Adrenal neoplasms (with or without Cushing's syndrome).  
Castration.  
Chromophobe adenoma.  
Craniopharyngioma.  
Diabetes mellitus (very common).  
Eunuchoidism (including Klinefelter's syndrome).  
Feminizing interstitial-cell testicular tumors.  
Hyperprolactinemia.  
Infantilism.  
Ingestion of female hormones (estrogen).  
Myxedema.  
Thyrotoxicosis.  
Old age produce less testosterone.

### **(5) Genitourinary Causes:**

Cystectomy.  
Perineal prostatectomy (frequently).  
Peyronie's disease.  
Phimosis.  
Priapism.  
Prostatitis.  
Suprapubic and transurethral prostatectomy (occasionally).  
Urethritis.

### **(6) Hematologic Causes:**

Hodgkin's disease.  
Leukemia, acute and chronic.  
Pernicious anemia.  
Sickle cell anemia.

### **(7) Infectious Causes:**

Elephantiasis.  
Genital tuberculosis.  
Gonorrhea.  
Mumps.



**(8) Neurologic Causes:**

Amyotrophic lateral sclerosis.  
Cerebral palsy.  
Spinal cord tumors or transection.  
Electric shock therapy.  
Multiple sclerosis.  
Myasthenia gravis.  
Nutritional deficiencies.  
Parkinsonism.  
Peripheral neuropathies affecting  
S<sub>2-4</sub> outflow.  
Spina bifida.  
Sympathectomy.  
Tabes dorsalis.  
Temporal lobe lesions.  
Cauda equina lesions.  
Prolapsed intravertebral disc.

**(9) Vascular Causes:**

Impaired blood flow (main cause).  
Excessive venous leakage (main cause).  
Aneurysm.  
Arteritis.  
Atherosclerosis.  
Thrombotic obstruction of aortic  
bifurcation.

**(10) Miscellaneous Causes:**

Chronic renal failure.  
Cirrhosis.  
Obesity.  
Toxicologic agents (Lead, Herbicides).  
Chronic alcoholism.  
 $\beta$ -blockers (antihypertensive drugs).  
Antipsychotic & antidepressant drugs  
(sometimes)

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When impaired erectile function occurs as a result of physical or metabolic causes, it is common for psychological or behavioral changes to develop over time in reaction to the dysfunction. Such changes may themselves affect sexual function so that even if the primary cause is discovered and successfully treated, sexual difficulties may persist on a psychogenic basis.

Similarly, although 45 to 50 percent of patients with impotence appear to have a primarily psychogenic origin for their dysfunction, physical or metabolic factors may contribute to the difficulty as well in a significant number of instances. Some men with sexual dysfunction that is already **marginal** may be pushed into frankly dysfunctional status by the onset of illness, by the use of sexually depressing drugs, or by physical changes ( including aging ) that would not ordinarily be sufficient grounds for impotence. The sexual urge and pleasure is present from infancy to old age, hence there is no age limit for erotic arousal and sexual performance. Naturally, libido diminishes after the menopause and the andropause due to the diminished secretion of testosterone; but it was found by Masters and Johnson that some couples in their sixties, seventies and even eighties were capable of coital activities when they were perfectly healthy physically and sexually aroused.

There is currently no means of identifying men who are particularly susceptible to the subsequent development of impotence or other sexual problems. The psychogenic causes of impotence may be conceptualized as falling into four major categories: **development, affective, interpersonal** and **cognitional**. The most common elements of these categories are summarized in the following table.

## Major Categories of Psychogenic Impotence

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### **(1) Developmental factors:**

Maternal or paternal dominance.  
Conflicted parent-child relationship.  
Severe negative family attitude toward sex (often associated with religious orthodoxy).  
Traumatic childhood sexual experience.  
Gender identity conflict.  
Traumatic first coital experience.  
Homosexuality.

### **(2) Affective factors:**

Anxiety (particularly fears of performance, anxiety about size of penis).  
Guilt.  
Depression.  
Poor self-esteem.  
Hypochondria.  
Mania.  
Fear of pregnancy.  
Fear of venereal disease.  
Sudden fear.  
Acute pain.

### **(3) Interpersonal factors:**

Poor communication.  
Hostility toward partner or spouse.  
Distrust of partner or spouse.  
Lack of physical attraction to partner or spouse.  
Divergent sexual preferences or sex value systems (regarding types of sexual activity, time of sexual activity; frequency of sexual activity etc...)  
Sex role conflicts.

### **(4) Cognitive factors:**

Sexual ignorance.  
Acceptance of cultural myths.  
Performance demands.

### **(5) Miscellaneous factors:**

Premature ejaculation.  
Isolated episodes of erectile failure. (often due to fatigue, inebriation, acute illness, or transient anxiety).  
Iatrogenic influences.  
Paraphilias.

---

It must be stressed that such etiologies are conjectural or guessing in that they are based on clinical impression. No inference is made that all men or even many men, with similar histories will be impotent. In fact, it appears that quite the opposite is true. Men frequently overcome potentially negative background factors that might appear to place them at substantial risk for the development of sexual difficulties. This phenomenon may be a reflection of the remarkable extent to which sex is a natural function.

Masters and Johnson described overt mother-son sexual encounters over a prolonged period of time (extending from childhood until beyond the time of puberty), as a factor of significance in some cases of **primary impotence**. Undue dominance of one parent may create a sense of inadequacy leading to erectile dysfunctions because of either lack of an effective male figure with whom to identify, (in cases of maternal dominance) or the impossibility of measuring up to the seemingly omnipotent father (in cases of paternal dominance). Other aspects of development that may be implicated in the genesis of impotence include, restrictive and rigid attitudes towards sex impressed upon the child in the home environment frequently found in association with religious orthodoxy. Traumatic



childhood sexual experiences including, punishment for masturbation or participation in sex play with other children, gender identity conflict, traumatic first attempts at intercourse and homosexuality.

Sometimes merging with such **developmental factors** in the occurrence of impotence are a number of intrapsychic or **affective elements** that may also arise independently. Anxiety, guilt, depression, and poor self-esteem are often intertwined in cases of sexual dysfunction; it may be virtually impossible to determine the temporal sequence that led to the difficulty. In some situations these components may arise only after the onset of impotence; nevertheless, therapeutic attention should be focused on such problems when they are present regardless of the cause that initially precipitated the dysfunction. Phobias related to sexual functioning are infrequently seen but are important determinants of therapeutic strategy, while the paraphilias-conditions in which sexual arousal is impossible without a particular abnormal stimulus e.g. (dressing in women's clothes, being spanked or humiliated, or wearing rubber garments) either fantasized or in actuality- are thought to be rare but are of indeterminant frequency.

The importance of **interpersonal factors** in the genesis of sexual dysfunction has been widely acknowledged in the last decade but had previously received little attention. Most cases of impotence involve these factors either as contributors to or original causes of the problem or as ramifications of the guilt, frustration and anger that may be generated by the sexual dysfunction overtime. The ego-defense mechanisms that both men and women frequently employ to cope with impotence including (rationalization, projection, emotional insulation, intellectualization, sublimation, avoidance, and denial of reality) are likely to create relationship difficulties that require direct therapeutic intervention.

**Iatrogenic influences** can lead to impotence in a number of different ways. In each instance, the common element is that a respected health-care professional plays a causative role in the development of erectile disturbances. This may come about through direct statements or through the omission of an anticipated statement; by misperceptions on the part of the patient about instructions or explanations he is given. By the perpetuation of myths by a respected authority; or by undue anxiety or over interpretation on the part of the professional. At times, impotence may occur iatrogenically in the context of treating another problem, such as infertility, heart disease, or prostatic disorders requiring surgery. Impaired erectile function may be the result of injudicious or incompetent sex therapy, developing either in situations in which the male has no prior history of dysfunction or when the male is under treatment for ejaculatory difficulties. Iatrogenic impotence can also occur when males misinterpret articles or books they have read about sexuality...

## **Widower's syndrome**

An interesting category of psychogenic impotence that has only recently been recognized is aptly described by the term: **Widower's syndrome**. In this disorder, generally involving men over the age of 50, there is characteristically a prolonged period of little or no sexual activity in conjunction with a lengthy and eventually fatal physical illness of the wife. During this protracted illness- cancer being the most frequent variety- the male often becomes a caretaker of his spouse, providing increasing physical and psychological ministrations to his partner as she becomes more and more severely debilitated and dependent on him. The husband may be frustrated by the lack of sexual outlet but avoids sexual contact with his sick wife except on infrequent occasions. His combined sense of conjugal duty and guilt over his wife is usually sufficient to restrain him from seeking extramarital sexual involvement; a few men in this category may seek out the services of a prostitute, an experience that typically proves unsatisfactory and tends to engender more guilt. After his wife finally dies and he observes what he considers to be an appropriate mourning period, the widower's first attempt at resuming sexual activity with his new wife or a partner ends in erectile failure, a situation that is as embarrassing as it is frustrating. From this point on, his performance anxieties are mobilized; in general, no matter how alluring or cooperative his subsequent partner (s) may be, he continues to be locked into a cycle of performance pressures, spectatoring, and subsequent erectile insecurity. Variants of the widower's syndrome may occur in men whose histories are not precisely the same as the one just outlined - for example, impotence is not uncommon after divorce as well as after sudden death of a spouse but the underlying dynamics of these situations appear to be different from the specifics of the widower's syndrome.

### **Diagnosis:**

Normal penile erections do not usually occur unless there are reasonably intact anatomic, neurologic, circulatory, and hormonal support mechanisms. For this reason, ascertaining whether an impotent man experiences erections under any special set of circumstances is an important aspect of the process of differential diagnosis. The initial objective is to determine whether impaired erectile function is due primarily to psychogenic factors or to physical ones; the sexual history is the most useful single indicator of this.

### **Historical clues for determining the etiology of impotence**

If a man achieves erections under certain conditions but not others, the likelihood is high that the impotence is psychogenic. Thus, the impotent man who experiences erections with masturbation, during homosexual activity, during extramarital sex, in response to reading or looking at erotic materials or with certain types of abnormal sexual activity (fellatio, sadomasochistic acts, or wearing particular items of clothing, for example) is unlikely to have a physical or metabolic explanation for his difficulties. For the same reason, the common



history of the man who has no difficulty achieving a firm erection, only to lose it promptly upon attempting vaginal insertion is strong evidence for a psychogenic problem.

Similarly, the presence of a firm erection at the time of awakening indicates that the capacity for normal erectile response is present physiologically. The clinical significance that can be placed on self-reports of morning erections is limited however. Some men may be unaware of such erections even though they are present. In other circumstances, it is the pattern of the relative frequency of morning erections viewed in the context of each man's history that is most important. A report of infrequent or absent morning erections is of no diagnostic assistance if the patient had a similar pattern prior to the onset of erectile difficulties. However, if a man has noticed a significant reduction in the frequency of his awakening with an erection since the onset of impotence, the possibility of an organic etiology is suggested. If firm erections are frequently present on awakening, it is unlikely that an organic cause for impotence exists.

The history will also reveal important information about the onset and progression of impotence that will aid in the diagnostic process. Impotence resulting from organic causes typically begins in an insidious fashion, becoming slowly and progressively more troublesome. In contrast, psychogenic impotence is likely to be of sudden onset - at times, the patient may be able to identify the specific date on which his difficulties began. However, some organic causes of impotence such as trauma (post-surgical or neurological injury) or drug use, can lead to impotence abruptly, so this point of differentiation needs to be balanced carefully with other bits of clinical and historical evidence. There may be a temporal association between the onset of psychogenic impotence and a stressful event. A man may first experience difficulty with erections after finding out that his wife has had an affair sexually with someone, after the death of a parent or a child, after divorce or after a stressful change at work. If the patient is not seen until long after the onset of his dysfunction, he may not remember the temporal relationship at all, but his wife or partner may recall the association if questioned. Although the stressful event initially impairs sexual responsiveness, subsequent anxieties and fears of performance become the perpetuating mechanism, so that when there is recovery from the stress sexual function may continue to be impeded.

Although organic impotence most frequently follows a progressively downhill course, psychogenic impotence may mimic and resemble this pattern. This may be the case when continued frustration, diminishing self-esteem and interpersonal problems lead to a pattern of avoidance of sexual activity as a means of coping; libido may or may not be reduced in such situations. Likewise, when depression occurs in relation to sexual difficulties, the dysfunctional state may progressively deteriorate until appropriate treatment is instituted.

It is important to recognize that impotence is not synonymous with the absence of erections. Many impotent men experience erections that are quite firm but are only transient; other men have a pattern of impaired penile rigidity but are able to obtain or maintain a partial degree of erection. Care should be used in interpreting the clinical significance of such variations. Although a patient who is able to have intercourse with one woman but not another is probably psychogenically impotent. There is also the possibility that the degree and firmness of his erections are the same with both women, but that differences between the women in vaginal size, muscle tone, and physical cooperation lead to differences in the man's ability to have intercourse. The temporal association of the onset of impotence with a major psychological stress may be related to the onset of a medical problem that was precipitated by the stress, rather than being indicative of a purely psychogenic origin of the dysfunction. Certain types of organic impotence may be **episodic**, rather than persistent and worsening, for example, the impotence caused by multiple sclerosis follows such a waxing and waning course. For such reasons, more reliable methods for differential diagnosis are desirable, and even when the history appears compatible with a psychological origin of sexual dysfunction, careful assessment of physical factors should also be conducted.

Impotence of long standing may have obscure origins. It is frequently impossible to determine with any hope of accuracy the specific mechanism (or mechanisms) that precipitated erectile failure. Nevertheless, evaluation of the patient's current physical and psychological status is important in determining the best course of treatment.

### **The physical examination as a source of diagnostic information**

The utility of a thorough physical examination in evaluating possible organic etiologies of impotence is considerable. Assessment of the signs of systemic disease is at least as important as diagnostic attention to the genitourinary tract. Detecting such organic impairments that may be relevant to erectile failure requires specific attention to the vascular and neurologic examination in a more detailed fashion than is usually attendant upon a general physical examination. When the history is suggestive of physical or metabolic cause underlying a potency disorder, the inability to detect concrete evidence of disease by the physical examination is not sufficient reason to decide that the problem must be psychological. In such cases and in other instances when information obtained from the history and physical examination is inconclusive, it is necessary to employ more specific testing to complete the diagnostic process.

### **Diagnostic testing for organic causes of impotence**

At the present time, psychogenic impotence is usually diagnosed by a process of exclusion after organic factors have been eliminated from consideration. The following methods selectively applied, may be helpful in pinpointing specific organic etiologies of impotence.



All impotent men with equivocal histories should undergo an **oral glucose tolerance test** after adequate dietary preparation (including at least 300 gm of carbohydrates daily for three days) for the detection of diabetes mellitus, which appears to be the single most common disease causing erectile failure. Even in men with no other symptoms that suggest the presence of diabetes, an increased rate of abnormal carbohydrate tolerance has been found. Detecting diabetes does not automatically imply that is the cause of impotence, since diabetic men may also be impotent for psychogenic or other organic reasons; but the presence of diabetes coupled with a history suggestive of an organic process indicates the need for further testing to evaluate neurologic and circulatory mechanisms.

Men with impotence accompanied by low libido or with a history compatible with an organic origin of dysfunction should have a measurement of **circulating testosterone** concentrations. The blood sample should be obtained in the early morning hours (between 7:00 and 10:00 A.M.), because there is diurnal variation of testosterone levels that makes it difficult to interpret low values obtained at other hours. Subnormal levels of testosterone may indicate the presence of hypogonadism and depending on the clinical context may require further diagnostic testing. If no medical contraindications exist, a trial of testosterone replacement therapy is warranted for a period of two to four months when a low testosterone value is found. If improvement in the potency problem does not occur during this time and no other medical explanation of the dysfunction is present, it is possible that the depressed testosterone level was a result of psychological stress, a course of sex therapy should then be recommended.

The use of laboratory testing for impotent men must be viewed within a context of the expense of such procedures. Modern laboratory methods permit economical screening profiles that include assessment of a spectrum of biochemical parameters that may be of diagnostic assistance. Evaluation of the **fasting blood sugar, liver function, serum electrolytes, lipid levels, thyroid function, creatinine and sex hormone binding globulin** and a **complete blood count (CBC)** may be useful. More specialized endocrine testing may be helpful in certain cases of hypogonadism; specifically, measurement of **LH, FSH, and prolactin** may be used in differentiating between hyper and hypogonadotropic hypogonadism.

If an impotent man is using a drug that may be contributing to his sexual problem, it is advisable to discontinue the medication e.g. antihypertensive drugs- and if necessary, to change to a different treatment program with less likelihood of impairing erectile response for a period of one or two months to observe possible improvement in sexual functioning. Since it is common for sexual difficulties to have multiple determinants, it is helpful to avoid the use of potentially compromising pharmacologic agents during a course of sex therapy as well.

## **NPT**

One of the most promising techniques to be developed for the diagnostic assessment of impotence is the physiologic monitoring of erection patterns during sleep. Based on observations showing that normal men have periodic reflex erections during the sleep cycle, the **measurement of nocturnal penile tumescence (NPT)** derives its usefulness from the fact that men with organic impotence have impaired erections or no erections at all during sleep, whereas men with psychogenic impotence have normal erection patterns. Presumably, the removal by the state of sleep of anxiety, internal conflicts, or other psychological factors that may impede erection during wakefulness allows normal body reflex pathways to take over and produces measurable episodes of penile tumescence. In an extensive series of investigations conducted in a sleep research laboratory, Karacan and his colleagues have analyzed (NPT) patterns in various groups of men with and without potency disorders. These workers utilized simultaneous **electroencephalograph tracings (EEG)** with continuous measurements of changes of penile circumference during sleep. From the findings of these studies, a simplified instrument has been developed to measure NPT patterns outside the sleep research laboratory. This device records changes in penile circumference during sleep that permit evaluation of the organic versus psychogenic origins of impotence. Although further systematic study is required to determine whether the reliability of this simplified instrument is comparable to the more complete data obtained from a sleep research laboratory, it is an accessible and more economical method of diagnostic screening that holds significant potential. Questions that need to be answered in regard to either technique include the validity of NPT measurements in depressed patients (since depression) is known to interfere with normal sleep patterns and the effects of drugs on erections associated with sleep. The Rigiscan device is of great use in diagnosis.

The NPT tracing does not distinguish between various types of organic impotence, although it appears to discriminate successfully between psychogenic and organic forms of impotence most of the time. It is usually necessary, if organic impotence is documented, to perform additional diagnostic studies to determine the exact mechanism leading to impotence, since this may have important implications for the treatment. Techniques that may be useful in this regard include: **arteriography or penile pulse and blood pressure measurements** to assess **vascular competency** and **cystometrography or direct neurophysiologic testing** to evaluate the neurologic factor. **Colour Dopler sonography** is of great diagnostic values to detect organic vascular lesions both arterial and venous. Intracavernosal injections; with muscle relaxants e.g. pappaverine can be used to produce erections for diagnostic and treatment purposes as well.

### **Treatment of organic impotence**

Cases of impotence arising primarily from organic causes must be medically or surgically managed in accord with the principles of the etiology. In some instances, the patient and his wife may benefit from ancillary counselling or



psychotherapy aimed at improving depression, self esteem, communication patterns, or other aspects of psychosocial health. However, when physical or metabolic conditions preclude the possibility of coital functioning, this fact must be pointed out to the couple and alternative suggestions for sexual expression should be discussed. In selected cases, consideration may be given to the implantation of a penile prosthetic device to permit participation in intercourse.

Although many cases of impotence are attributable to psychogenic factors, significant numbers of men, are impotent because of irreversible organic causes. In the past decade, increasing interest in sexual function coupled with advancing technology has led to the development of a variety of penile prosthetic devices that are implanted surgically in men with organic impotence to facilitate their participation in coital function. Candidates for such surgery include men with impotence resulting from diabetes, penile or pelvic trauma, vascular or neurologic disorders and various types of operations (for example, impotence due to prostatectomy, cystectomy, colectomy or aneurysm repair).

### Penile prostheses

Different types of penile prostheses are available for the treatment of impotence. The basic difference involves whether a fixed rod prosthesis is used or whether an inflatable prosthetic device is employed. **Fixed rod devices** made of different materials, such as Silastic (silicone rubber), acrylic, or polyethylene, have been used by a number of surgeons. These devices have the advantage of relative simplicity of surgical technique of insertion but they result in a perpetual state of semierrection once the operation has been carried out, potentially creating both psychological distress and physical discomfort, (Fig. 31).

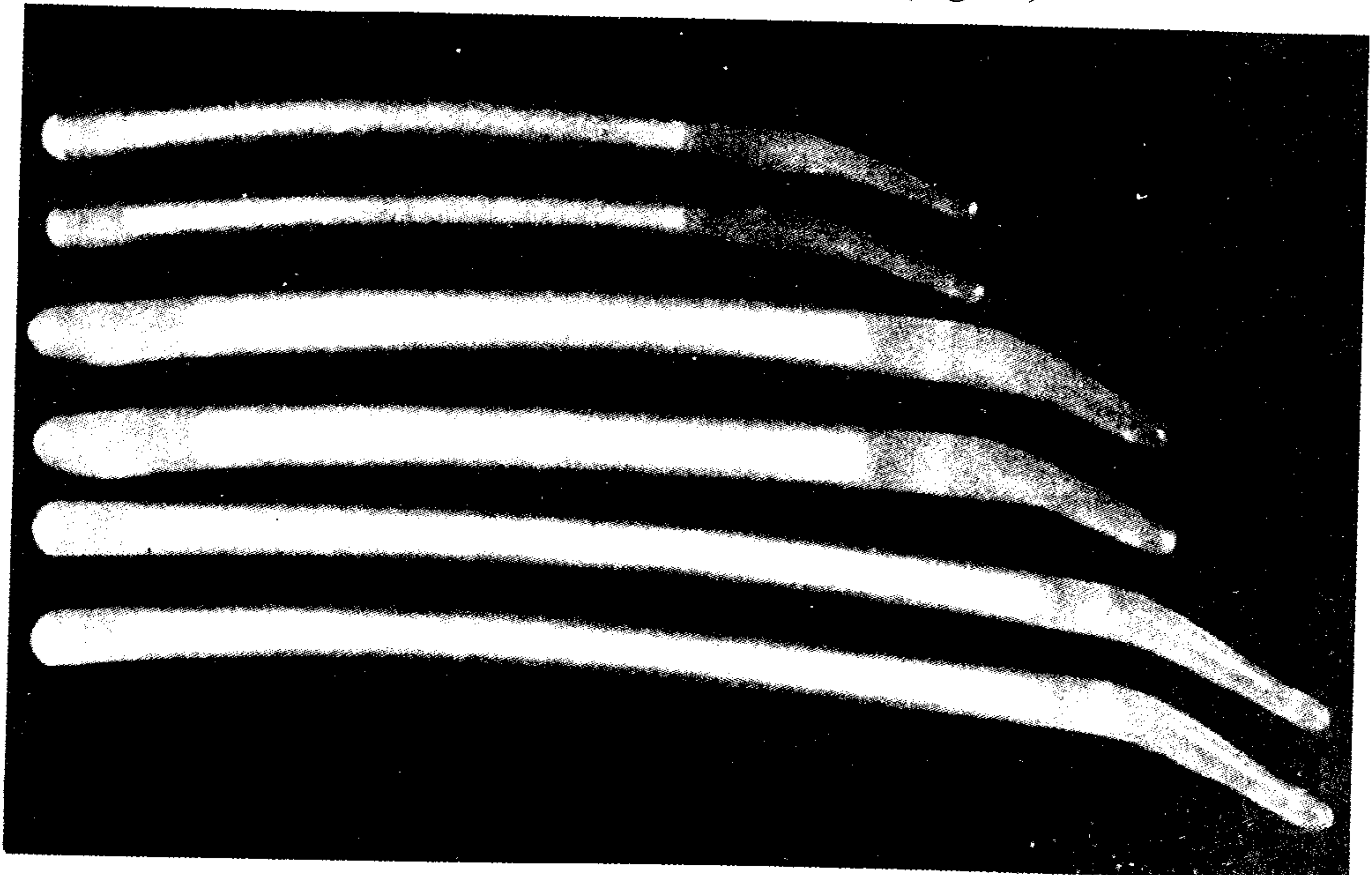


Figure 31. Three pairs of Small-Carrion penile prostheses.

The **inflatable penile prosthesis** produces an erection only when it is desired; the appearance of the penis in both the flaccid and erect states is completely normal (Fig. 32). Although the surgical insertion of this device is technically more difficult than implantation of the fixed rod, there appears to be a reduced risk of tissue erosion or perforation because of the more favorable pressure dynamics. Both the patient and his wife seem to indicate a greater degree of acceptance of the inflatable device, which actually consists of two tapered inflatable cylinders, which are placed within the tunica albuginea adjacent to the corpora cavernosa. These cylinders which come in varied sizes, are connected by tubing to a simple pump that is placed low in the scrotum outside the tunica vaginalis. A fluid storage reservoir is implanted in the prevesical space. The patient activates the pump by compressing the bulb in the scrotum, radioopaque fluid is then transferred from the fluid reservoir to the penile cylinders, causing the cylinders to expand and producing penile tumescence. The erection is released and abolished mechanically by pressing a valve in the lower portion of the scrotal bulb, which allows fluid to be evacuated from the penile cylinders back to the reservoir. The operation now appears to be an accepted method of treatment for organic impotence.

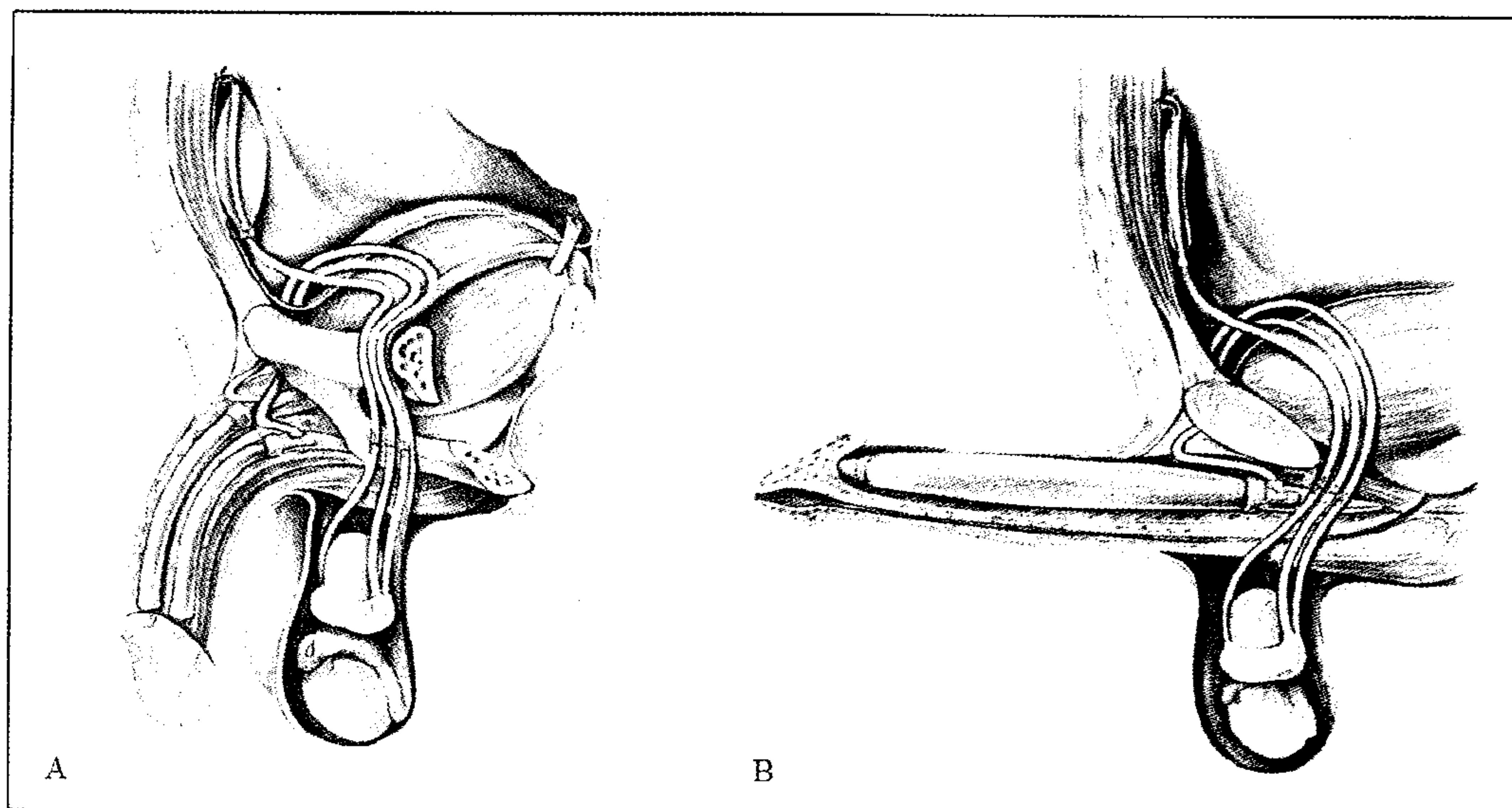


Figure (32): An inflatable penile prosthesis after implantation. (A) Fluid is in the reservoir; the penis is flaccid. (B) Fluid is in the penile cylinders; the penis is erect. (Courtesy of American Medical Systems Inc.)

Further study is needed to become fully informed about patient acceptance of penile prosthetic devices and to assess the psychological impact of this type of surgery. Although some authors advocate the use of such a therapeutic approach for men with psychogenic impotence, it seems wisest to exercise considerable



caution in this regard; such patients should probably be given an intensive exposure to sex therapy before considering operative techniques to cure their impotence. In addition, it should be recognized that diabetic men may be predisposed to a higher rate of surgical complications postoperatively with this procedure due to microvasculr problems and impaired immunity. Thus, penile implants should be undertaken in this population only when the potential risks as well as benefits have been carefully described to the patient.

### **Treatment of psychogenic impotence**

In cases of psychogenic impotence or in situations in which a significant component of psychosocial difficulty contributes to the etiology or perpetuation of impotence, sex therapy is indicated if counselling attempts have not reversed the dysfunction. Sex therapy ideally includes both the impotent man and his partner, since therapeutic cooperation of the wife appears to be an important determinant of the outcome of therapy. The partner's presence during therapy sessions provides an opportunity for observation of patterns of communication within the relationship as well as a source of information about sexual function and related behavior occurring between therapy sessions.

### **Psychotherapy**

The psychotherapeutic approach to impotence shares certain common features with the approach to the treatment of sexual dysfunction. These features include the following points:

1. It is not useful to blame one's partner or oneself for the occurrence of sexual dysfunction.
2. There is no such thing as an uninvolved partner when sexual difficulties exist.
3. Sexual dysfunctions are common problems and do not usually indicate psychopathology always.
4. It is not always possible to be certain of the precise origin of a sexual dysfunction, but treatment can frequently proceed successfully even when such knowledge is lacking.
5. In general, cultural stereotypes about how men and women should behave or function sexually are misleading and counterproductive.
6. Sex is not something a man does to a woman or for a woman; it is something a man and a woman do together.
7. Sex does not only mean intercourse, apart from procreative purposes; there is nothing inherent in coitus that makes it always more exciting, more gratifying, or more valuable than other forms of physical contact.
8. Sex can be a form of interpersonal communication at a high intimate level; when sexual communications are not satisfactory, it often indicates that other aspects of the relationship might benefit from enhanced communication as well.
9. Using past feelings or behaviors to predict the present is not likely to be helpful, since such predictions tend to become self-fulfilling prophecies or may limit the freedom to change.

10. Developing awareness of one's feelings and the ability to communicate feelings and needs to one's partner sets the stage for effective sexual interaction.

11. Assuming responsibility for oneself rather than delegating this responsibility to one's partner is often an effective means of improving the sexual relationship.

The specific aspects of treating impotence by sex therapy, beyond the general approaches mentioned before, depend in large part on the historical detail of each case. Factors such as the etiology of the dysfunction, the presence or absence of other dysfunctions or sexual problems, the status of the relationship and intrapsychic dynamics are all important determinants of specific strategies that may be employed.

Most cases of impotence are characterized by fears of performance, a debilitating set of sexual anxieties that arise when the male is unable to obtain or maintain a normal erection and begins pressuring himself to improve his functioning. Sometimes the wife contributes to such anxieties - either purposely (by making sexual demands or humiliating remarks for example) or unintentionally (by pretending that nothing is wrong or by attempting to be supportive) - and may complicate the difficulties. The three approaches to reducing performance anxieties include the prohibiting of any direct sexual activity, the process of identification and verbalization, the third - and usually the most important approach - involves the introduction of the principles of **sensate focus**.

Attention is given throughout the therapy program to verbal communication skills, education about sexual anatomy and physiology, attitude changes and other aspects of psychological management. In some cases marriage counselling is the predominant theme of therapy, in other cases, improving self-esteem, reducing guilt, modifying maladaptive ego-defense mechanisms, and altering problems of imagery are some areas likely to receive a major degree of therapeutic focus.

### **Success rate**

The treatment statistics reported in Human Sexual Inadequacy showed a failure rate of 40.6 percent of primary impotence and 30.9 percent for secondary impotence. Between 1971 and 1977, at the Masters & Johnson Institute, a failure rate of 21.1 percent was recorded while treating primary impotence, at the same time, the failure rate while treating secondary impotence was 14.6 percent only. It is likely that as more effective diagnostic methods become available and further delineation of the mechanisms causing impotence takes place, there will be great gains in treatment outcome.



## Recent advances in the treatment of impotence

More sex education is required to counter the considerable ignorance and misinformation concerning impotence not only among the general public but among doctors, who are often reluctant to discuss sexual matters with their patients.

### • Intracavernosal pharmacotherapy:

Smooth muscle relaxant papaverine,  $\alpha$ -blocker phenoxybenzamine, phentolamine and prostaglandin E<sub>1</sub> and other drugs such as calcitonin gene related peptide are being evaluated; when injected intracavernosally they produce an erection. The doses and types of drug used are adjusted to suit each patient. The main side effect associated with self injection is a prolonged erection or even priapism sometimes. The development of painless, fibrotic nodules that may cause penile curvature is reported, also Peyronie's disease occasionally develops. A newly developed combination of a drug called (Invicorp) is effective intracavernosally when "venogenic and arteriogenic" erectile dysfunction is difficult to treat. Invicorp is a combination of vasoactive intestinal polypeptide "VIP" and phentolamine mesylate.

### • Transurethral suppository:

Prostaglandin E<sub>1</sub> administered transurethral is a novel system designed for treating impotence under the name "Muse" which is alprostadil, available now in 3 doses (250, 500, 1000  $\mu$ g).

### • Medical treatment:

- 1- The appeal of a pill for restoring potency is attested by the enormous world wide sales of homoeopathic remedies claiming to have this effect. Fortunately few drugs have been recently discovered namely, **Sildenafil citrate (Viagra)**. It is an orally active inhibitor of phosphodiesterase 5, available in doses of (25, 50 and 100 mg) and is approved by the FDA, 1998. Its main side effects are flushing, dyspepsia, headache mild or moderate but it must be used under medical supervision because some patients complained of nasal congestion, abnormal vision, diarrhea, dizziness and possible rash. Viagra is contraindicated in patients with any cardiac risk, liver cirrhosis, renal failure, sickle cell anaemia, multiple myeloma, leukemia, Peyronie's disease, cavernosal fibrosis, anatomical deformity of the penis, active peptic ulcer, retinitis pigmentosa and patients using nitric oxide donors or nitrates in any form. The reported percentage of success among users is nearly 77%. The misuse of Viagra by taking it as an aphrodisiac or to be more virile by healthy ordinary males leads to the contrary and ultimately they end with erectile dysfunctions !... (R. Kirby, 1998).
- 2- **Oral phentolamine (Vasomax):** Phentolamine is commonly used intracavernosally usually in combination with papaverine but when used orally it acts through antagonism of  $\alpha_1$ , and  $\alpha_2$  adrenergic receptors, as well as activation of a non-adrenergic mechanisms to induce relaxation of the



corpus cavernosum smooth muscle to produce erection. Its side effects are similar to Viagra but with more dizziness, tachycardia, nausea and hypotension.

- 3- **Oral Apomorphine:** Apomorphine is a dopaminergic drug that was found to have a central erectogenic activity when taken sublingual.
  - 4- **Topical prostaglandin E<sub>1</sub> gel:** Topical (Alprostadil) gel when applied on the glans penis, patients responded by achieving an erection. The only local adverse effect was erythema of the glans penis; sometimes burning sensations and irritation, further research is needed before a final positive conclusion is reached.
  - 5- **Vacuum devices:** Vacuum constrictive devices are non-invasive, inexpensive and simple treatment for patients who do not respond to intracavernosal injections. Some patients complain that the erection produced is cold and lifeless and the ring necessary to retain the erection may cause discomfort especially during ejaculation but it is particularly useful in the older and less fit men.
- **Surgical treatment:**

Only fair results have been reported after excision and ligation of the deep dorsal vein in men with venous leakage. Revascularisation of the corpora is now technically feasible, with success rates of 50-60% in young patients but microsurgery is time consuming and expensive. Long term follow up of veno-ligation operations is not promising.
  - **Summary points:**
    - The public and many doctors are ignorant about available treatments for impotence. The disorder is strongly related to age, with an estimated prevalence of 2% at age 40 years, rising to 25 – 30% by the age of 65 years. In men over 75 years it is probably over 50%.
    - Impotence often has multiple causes and diagnostic evaluation should include: psychosexual, neurological, endocrinological, vascular (venous and arterial), traumatic and iatrogenic causes including drugs and surgery.
    - Risk factors for vasculogenic impotence are smoking, hypertension, hyperlipidaemia, diabetes mellitus and other vascular diseases.

## **Premature Ejaculation**

Although premature ejaculation is a common sexual dysfunction, there is no precise definition of this problem that is clinically satisfactory at present; partly because of the relative nature of the timing of ejaculation in the context of the female partner's sexual response cycle. If the man's rapid ejaculation limits his partner's ability to reach high level of sexual arousal or orgasm, then a problematic situation do exist. However, in some couples rapidity of ejaculation

does not impede the coital responsiveness of the woman; thus, it does not appear needed to label this pattern arbitrarily as sexual dysfunction.

## **Definition**

The subjective nature of evaluating the length of time a man is able to participate in coitus without ejaculating is further complicated by sociocultural and personality factors. Dr. Helen S. Kaplan, (1974 ) stated that premature ejaculation is the most common presenting male symptom in clinical practice; **"the combination of dysfunctions encountered most frequently in clinical practice is premature ejaculation in the husband and some degree of sexual dysfunction in the wife"**.

Unfortunately, sex therapists have found that even defining premature ejaculation is not a simple task. Among the factors to be considered are the questions of: **"when, where, and with whom" ?**. Premature ejaculation clearly exists if the male has an orgasm prior to penetration. If orgasm occurs within a few seconds after intromission, it is also usually considered premature. Beyond that, definition becomes considerably more complex. For example, if the partners have orgasms with equal rapidity, then it would not necessarily be a case of premature ejaculation. The question then becomes premature for whom, or with whom ?. If a firm erection can be maintained for 5 minutes, but the partner requires an even longer period in order to have an orgasm, the male could be considered a premature ejaculator- with that particular partner. However, the same man having intercourse with a woman who has an orgasm within 2 or 3 minutes after penetration, cannot be considered a premature ejaculator. Therefore., the question is relative and also relates to the attitudes of the sex partner.

## **Research**

Sex researchers use many different definitions of premature ejaculation. Masters and Johnson do not consider it a problem, unless it occurs 50% or more of the times coitus is attempted. Dr. Meyer of Johns Hopkins claims that a man who ejaculates before 15 thrusts after penetration is a premature ejaculator. Dr. H. Kaplan maintains that a man should be able to exert voluntary control over his ejaculatory reflex. Another definition based, not in terms of length of time in intromission but whether the sexual partner is satisfied with the length of the coital thrusting. The American Psychiatric Association Task Force on nomenclature provides yet another definition; **ejaculation occurring before the individual wishes it, because of persistent and recurrent absence of reasonable voluntary control during sexual activity**.

Trained as a zoologist, Kinsey noted that most mammals including primates, ejaculate almost instantly upon penetration. He therefore saw this as a problem for humans since some women require 10 -15 minutes or longer of intense stimulation in order to reach orgasm... Kinsey noted, regarding the longer



time period of stimulation needed by some women : "It is of course, demanding that the male be quite abnormal in his ability to prolong sexual activity without ejaculation, if he is required to match the female partner". Unfortunately, not only premature ejaculation is difficult to define, but the precise cause is not known.

Kinsey, Pomeroy and Martin reported that 75 percent of the men they studied ejaculated within 3 minutes of vaginal containment. But these data may have been influenced by their belief that rapid ejaculation was a biologically superior trait, as well as by the fact that their study was conducted more than three decades ago. The timing of rapid ejaculation may simply reflect a primary focus on the sexual gratification of the male, an attitude that seems to predominate in men from low socio-economic levels or with limited education. However, this double standard regarding sex; (**Sex is for the man's pleasure, not for the woman's**), may be found cutting across cultural and socio-economic lines...!

Severe cases of premature ejaculation are easy to diagnose, because they are marked by a pattern of ejaculation before penetration or during the actual act of penile introduction, or shortly after insertion of the penis into the vagina. In men with a less virulent problem of ejaculatory rapidity, premature ejaculation has been defined as the inability of the male to control ejaculation long enough to satisfy his partner in at least 50 percent of their coital opportunities, provided there is no female sexual dysfunction, or inability of the male to exert voluntary control over the ejaculatory reflex. LoPiccolo suggests that it is easier to define what is not premature ejaculation: **"Both husband and wife agree that the quality of their sexual encounters is not influenced by efforts to delay ejaculation"**. Despite the difficulty of formulating a precise definition of premature ejaculation that will be applicable in all cases, as a practical matter it is not very complicated to decide when lack of ejaculatory control is problematic.

## **Etiology**

There is no reliable research documentation of the cause or causes of premature ejaculation. Ejaculation is a reflex phenomenon regulated by neurologic and possibly endocrine pathways; nevertheless, clinical evidence indicates that there is a strong learned component to the process as well. Common historical patterns have been found in men with long-standing histories of premature ejaculation, with the central feature being early coital experiences in which the men ejaculated rapidly. Typical histories included first coital experiences under circumstances of fear of being discovered, (such as in the back seat of a car, in a teenager's home while parents were away or in an awkward position) or encouragement for rapid ejaculation from a prostitute interested in quick turnover of customers!. In effect, the man became conditioned to fast ejaculation and in subsequent (more relaxed) sexual encounters he was often unable to alter the pattern that has been established. Viewed from this perspective, premature ejaculation is seen as a **primarily psychophysiologic disorder**.



**Past theories of organic origins** of premature ejaculation usually identified prostatic or other genito-urinary inflammation as the cause; however, more recent examination of large series of patients has not supported such a view. Some authors have suggested that; relationship problems, unconscious hostility toward or fear of women, or hidden female sexual arousal problems are all processes underlying premature ejaculation. But these dynamics appear infrequently in couples seen at the Masters and Johnson Institute and in practice.

## **Treatment**

The general principles of sex therapy outlined earlier in the treatment of psychogenic impotence apply to the couple for whom premature ejaculation is a problem. The therapeutic approach is optimal when working with the couple, since premature ejaculation is usually a matter of sexual distress to the woman in addition to being a male dysfunction. The woman may harbor resentment or hostility toward her partner, as a result of a long-term sexual frustration she has experienced and the lack of intimacy that has characterized their sexual relationship. The latter situation is found particularly if the man has persistently tried to overcome his ejaculatory difficulty by mental distraction (such as counting backwards or thinking about work) shortening the time of noncoital sex play, or using other techniques to limit his arousal. Such well-meant and innocent but not effective practices may simply convince the woman of her partner's selfishness.

After thorough psychosexual histories are obtained, treatment begins with an explanation of the evolution of the problem of premature ejaculation. The specialists carefully delineate the fact that the man has not been capable of voluntarily controlling the timing of ejaculation, and they stress that this situation does not automatically equate with selfishness, fear, or hostility. The couple is told that rapid ejaculation is a common sexual problem that has an excellent prognosis with short term therapy.

With concurrent attention to relationship dynamics and the existence of other sexual problems, the couple is then given basic information about the physiology of ejaculation. They are informed that although the precise neurophysiologic events that trigger ejaculation in the male are not known, a program of reconditioning the ejaculatory reflex response can be easily undertaken. Because performance anxiety typically develops in men with premature ejaculation, particularly when their wives are dissatisfied sexually, early attention is devoted to techniques of anxiety reduction in a manner similar to that outlined earlier in the treatment of psychogenic impotence.

When genital touching is to be incorporated into **sensate focus** opportunities, the woman is instructed in the use of a specific physiologic method for reducing the tendency for rapid ejaculation. In this procedure, known as the "**squeeze technique**", the wife should avoid pinching the penis or scratching it with her fingernails. For unknown neurophysiologic reasons, this maneuver

reduced the urgency of ejaculatory tension and when used with consistency, reconditions the pattern of ejaculatory timing to improve control surprisingly well. The squeeze technique works considerably less effectively when the man attempts to apply it to himself. When improved ejaculatory control is attained gradually and if no other sexual problems are present, another version of the squeeze technique is applied to the base of the penis hence called the "**Basilar squeeze**" or "**Semans grip**".

### **Success rate**

Most men have considerable improvement in control over ejaculation prior to the end of the two week program of sex therapy, typically experiencing 10 to 15 minutes of intravaginal containment with active thrusting. In general, couples need to continue the use of the squeeze technique for three to six months after the intensive phase of therapy to achieve a permanent reconditioning of the ejaculatory response. In Human Sexual Inadequacy, a failure rate of only 2.7 percent was reported in a series of 186 men with premature ejaculation; other workers describe excellent therapeutic outcomes as well.

### **Summary**

To summarize the evidence regarding premature ejaculation:

1. Medical data indicate that organic factors may account for about 10% of the causes of this syndrome.
2. This is in keeping with psychiatric findings that premature ejaculation has an emotional basis in about 90% of the cases; the most frequently encountered factor in clinical practice is anxiety.
3. The emotional basis of premature ejaculation in many cases is further demonstrated by the more than 90% success rate in treating the syndrome by sex therapy.
4. The use of condoms or topical anaesthetics by circumcised or non-circumcised males has little or no effect in reducing premature ejaculation.
5. All evidence suggests that the problem is increasing in sex clinics, at present, it is the most frequent presented male problem.
6. Some authors attributed the increase to women's rising expectations of sexual satisfaction.

## **Ejaculation Incompetence**

### **Terminology**

The male sexual dysfunction that is least frequently encountered in clinical populations (and is presumed to be of correspondingly low prevalence) is ejaculatory incompetence, or the inability to ejaculate intravaginally. Men with this disorder rarely have difficulty with erection and typically are able to maintain a firm erection during lengthy episodes of coitus. The functional problem may be



conceptualized as being the opposite of premature ejaculation. Although **secondary ejaculatory incompetence** is sometimes seen, (loss of ability to ejaculate intravaginally after a previous history of normal coital ejaculation), the most common form of **ejaculatory incompetence is primary**, (never having been able to ejaculate intravaginally). There is variability in the pattern of noncoital ejaculations. Some men with ejaculatory incompetence can ejaculate with solitary masturbation, others can ejaculate by noncoital partner sex stimulation, (manual or oral) while still others are unable to ejaculate by any means. In a small percentage of cases, ejaculatory incompetence may be **situational**, occurring with one partner but not another.

## **Etiology**

**Organic causes** of ejaculatory incompetence include congenital anatomic lesions of the genitourinary system, spinal cord lesions, damage to the lumbar sympathetic ganglia, and use of drugs that impair sympathetic tone, such as guanethidine. The phenothiazines may also delay or prevent ejaculation.

However, most instances of ejaculatory incompetence are of **psychogenic origin**. Etiologic factors that may be seen include the effects of severe religious orthodoxy during childhood, which instills attitudes of sex as sinful, the genitals as unclean, and the act of masturbation to ejaculation as evil and destructive. Hostility toward or rejection of the spouse, homosexuality, fear of pregnancy, the desire not to have children, and specific psychosocial trauma, (the discovery by a man that his wife has been having an affair with another man or that she has been raped, for example) have also been described as important in the development of ejaculatory incompetence.

## **Treatment**

It is important to explain the etiology of the dysfunction carefully to both partners, since the woman's attitudes towards her husband's failure to ejaculate may be quite negative, particularly if she wants to have children and perceives her **husband as willfully preventing conception**. Since the woman will be called upon to play an active role in the reversal of the ejaculatory incompetence, neutralizing initial hostilities or distrust is a necessary early therapeutic concern.

The **sensate focus exercises** are employed in a fashion similar to that used in the treatment of impotence. The goal is to facilitate the man's awareness of his own physical sensations, improve nonverbal communication patterns, and eliminate the pressure of performance. When genital touching occurs the wife is encouraged to stimulate the penis in a deliberate and demanding fashion, with the man communicating to her information about timing, pressure, and types of stimulating motions that he finds most arousing sexually. The first objective is for the woman to induce ejaculation by manual stimulation. Once this has been accomplished, sex play in the female-astride position is recommended and insert



the penis vaginally as ejaculation becomes imminent. A single occasion of intravaginal ejaculation is usually all that is required to reverse the dysfunction permanently. In cases in which intravaginal ejaculation has not occurred despite repeated attempts with therapeutic suggestion and analysis, the woman should bring the husband to ejaculation by the use of manual stimulation, in a position that allows the ejaculate to spurt onto the external female genitalia. As the husband becomes more comfortable seeing his ejaculatory fluid in genital contact with his wife, intravaginal ejaculation may occur more easily. Throughout the treatment of the couple in whom ejaculatory incompetence is present, emphasis must be placed on effective patterns of communication. In instances of patients who do not respond to sex therapy, referral for in depth individual therapy may be beneficial.

## **Mixed Sexual Dysfunctions**

It is not surprising that combinations of sexual dysfunctions may exist in the same man, since common etiologic factors appear to underlie many of these disorders. The most frequently encountered combination is premature ejaculation and impotence; indeed, it appears that anxiety over sexual performance resulting from rapid ejaculation is a cause of impotence. Much less frequently, ejaculatory incompetence may coexist with impotence.

### **Treatment**

In treating these conditions, it is generally necessary to deal initially with the erectile failure and to institute appropriate management of the ejaculatory dysfunction only after security has been gained in erectile function. The exception to this strategy is the instance in which a man ejaculates prematurely while the penis is flaccid, in this situation, the squeeze technique must be used to provide ejaculatory control before adequate erections can be attained.

# 8

## **FEMALE SEXUAL INADEQUACY (DYSFUNCTIONS)**

- **Frigidity.**
- **Important Facts Concerning Women's Sexuality.**
- **Vaginismus.**

# **FEMALE SEXUAL DYSFUNCTIONS**

## **Frigidity**

There was a time when we used a single word to describe all possible female sexual dysfunctions; frigidity (literally coldness, from Latin **frigidus** : cold). Today we know that this vague term is no longer acceptable because it was lacking diagnostic precision. Up till 1970, frigidity was variably applied to women who were uninterested in sex, women who never experienced orgasm and women who purportedly experienced clitoral instead of vaginal orgasms (a distinction that is now known to be erroneous).

### **Orgasmic dysfunction and frigidity:**

The great disparity which people experience in their sexual feelings, provides one of the most baffling aspects of sex. No side of human nature is so unpredictable or so varied and impossible to tell from people's appearances or bearing or clothing, what their erotic nature is really like?...

Variations can range from states of extreme sexual desire, with or without the ability to have their sexual desires fulfilled; to those of complete absence of any sexual feeling what so ever. For instance, it is by no means uncommon for a female never to experience those changes of sex feelings in her sexual organs which some other female may experience daily or perhaps almost hourly... Far more common than this, is the female who has never experienced genital pleasurable sensations, and who has therefore no understanding whatever of the ordinary desires and sexual needs of others.

Clearly therefore, it may be most difficult for people to understand each other, since quite intimate discussion often fails to reveal such differences, each taking for granted that the other's experience is identical.

Again, the sexual feelings of people and their daily behavior often show curiously little correlation. Thus, a female with strong sexual desires may be very reserved or even prudish, and may behave in public with the utmost strictness all her life; indeed, she may fear and disapprove of the whole sexual side of her sexy nature. While a frigid female may be very well satisfied with spinsterhood or she may make an excellent wife, yet frigid women are well known to go quite to the other extreme, taking prostitution as a career. Quite often, it is women of this type, who find and even need reassurance, in a continuous change and replacement of her sexual partners.

### **Sexual desire**

It is by no means necessary to assume that because a man is healthy or in the prime of his life, perhaps even an athlete or a champion, that he is bound to have strong sexual feelings because virility is a matter of the spirit more than the



body. But, is it certain that a man with a reputation for promiscuity is necessarily either sexually competent or virile and potent e.g. Casa Nova or Don Juan, because history has proved that he could be impotent or even homosexual sometimes...

Even experienced observers may fail to recognise that a person is suffering from a sexual disorder; indeed, it may be impossible to guess from the bearing or behavior of an intimate couple whether their marriage has been consummated or not. The late Sir Green Armittage reported a 3% of female infertility cases are due to an intact hymen...

Some women experience such a slight orgasm and they get satisfied, while other women are desperately disturbed if they are deprived of it for any reason, it all depends upon her sexual threshold and the prevailing circumstances. It is a curious fact that although orgasm is an essential part of the reproductive process in the male, namely, the deposition of semen in the vagina during the process of ejaculation; it has no equivalent value in the female. Perhaps, it is not surprising therefore, that so many women fail to achieve it ?.

### **True frigidity**

The term frigidity which was used to describe any woman who is unable to obtain an orgasm, no matter how ardent and strong her sexual feelings may be is not truly correct. Criticism here is justified because frigidity should be reserved for those women who lack emotional and physical responses to such sexual relationship. Thus, a woman may be frigid throughout all her life, or only in a certain limited time (for example during pregnancy or through the peripartum). As well, she may be frigid to one certain man but not to another (for example some prostitutes are known to get their orgasm only with one particular lover!). So, for these women who have a normal sexual desire but cannot attain an orgasm; the term "**lacking orgasmic capacity**" is suitable scientifically.

Although there is no uniform agreement on the precise diagnostic terminology to be used in reference to women who do not experience orgasm, many professionals have adopted the classification suggested by Masters and Johnson.

### **Varieties of anorgasmia**

Primary orgasmic dysfunction or **primary anorgasmia** is defined as, the condition of a female who never has attained orgasm under any circumstances. The classification of **situational orgasmic dysfunction** or **situational anorgasmia** applies to women who have achieved orgasm on one or more occasion, but only under certain circumstances- for example, women who are orgasmic during masturbation but not during stimulation by their husbands. Women who are orgasmic by many special means but are nonorgasmic during intercourse, are described in a subcategory of situational orgasmic dysfunction known as, **coital orgasmic inadequacy** or **coital anorgasmia**. **Random**

**orgasmic dysfunction** refers to women who have experienced orgasm in different types of sexual activity but only on an infrequent basis. **Secondary orgasmic dysfunction** describes women who are regularly orgasmic at one time but no longer are.

### **Percentage of anorgasmia**

There is some controversy at the present time regarding the number of women who are anorgasmic, however, the available data are in good agreement. **Kinsey** and his colleagues reported that 10 percent of married women never experienced coital orgasm. **Chesser** found that 10 percent of British women rarely experienced orgasm, while 5 percent never experienced orgasm during intercourse. **Fisher** reported that approximately 6 percent of married women never experienced orgasm. **Levine** and **Yost** reported that 5 percent of patients seen in a general gynaecologic clinic had never been orgasmic with a sexual partner, while 17 percent had difficulty reaching orgasm with a partner. From a clinical perspective, women who are unhappy about lack of orgasmic responsiveness are far more likely to seek treatment than women who are nonorgasmic but do not feel dissatisfied sexually. These percentages relate only to non circumcised females, with an average percentage of 9%.

### **Etiology**

Much less is known about organic factors causing female sexual dysfunction than is the case with male sexual dysfunction.

#### **Organic Causes:**

1. **Conditions that affect the nerve supply to the pelvis**, for example, multiple sclerosis, spinal cord tumors or trauma, amyotrophic lateral sclerosis, nutritional deficiencies, or diabetic neuropathy and female circumcision.
2. **Conditions that impair the vascular integrity of vaginal circulation**, for example, abdominal aneurysm, thrombotic obstruction, arteritis, or severe arteriosclerosis and risk factors of vasculogenic causes are sometimes responsible for loss of orgasmic responsiveness.
3. **Endocrine disorders**, for example, Addison's disease, Cushing's syndrome, hypothyroidism, hyperthyroidism, hypopituitarism, or diabetes mellitus may likewise interfere with female sexual response and usually are correctable by appropriate medical treatment of the underlying disorder.
4. **Gynaecologic factors**, including the impact of extensive surgical procedures or female sex mutilation, chronic vaginal infection and congenital anomalies.
5. **Some chronic illnesses** impair orgasmic responsiveness indirectly by affecting libido and general health in the diseased woman.



## Psychogenic causes

Analysis of large series of cases of orgasmic dysfunction seen at the Masters & Johnson Institute, indicates that 90 percent or more are psychogenic in origin.

It is frequently difficult to trace the etiology of orgasmic dysfunction because so many women have been exposed to **negative cultural conditioning** in regard to sexuality. Until recently, the prevailing message most women received throughout childhood, adolescence and adulthood was that sexuality must be repressed. While the male has the society's blessing in becoming sexual and exploring his own sexuality, females are expected to be "**good**", "**pure**" that is to postpone sexual feelings or sexual participation until after marriage. The growing girl was traditionally permitted to develop only simulated facets of her sexuality, namely, those aspects having to do with symbolic romanticism and rehearsals of maternalism. To these **cultural limits** must be added the constraints imposed by **rigid social traditions** in which the male has been expected to initiate both courtship and sexual behavior; the female has been placed into a chronic role of the relatively passive partner in both social and sexual aspects of development.

Aside from the broad cultural influences on female sexuality just mentioned, a number of **specific developmental factors** appear to have relevance to orgasmic dysfunction or frigidity. Childhood exposure to a home environment of **rigid religious orthodoxy** and its accompanying negative attitudes toward sex and nudity is a frequently recurring theme in women with orgasmic inadequacy. **Traumatic sexual experiences** during childhood or adolescence, such as incest or rape, may also be associated with orgasmic dysfunction. However, it must be emphasized that sexual dysfunction in adulthood does not uniformly follow from such developmental histories; why one woman copes successfully with potentially negative influences and another female develops long-range sequelae is not well understood.

**Affective factors** may also be implicated in the etiology of orgasmic dysfunction. Although **guilt** related to sexual practices may be a residual hallmark of developmental conditioning, guilt may also be a result of other dynamics reflecting either intrapsychic or interpersonal processes. **Anxiety** has been less widely recognized as a contributor to sexual dysfunction in women than in men; however, women are frequently victims of performance anxieties that arise not only from their self-perceptions but from the demands placed on them by their partners. The man who attempts to measure his own virility by the frequency or intensity of his partner's orgasmic responses may be contributing significantly to her fears of performance. Anxiety may also be related to physical attractiveness, worry about a partner's sexual adequacy (particularly in relation to impotence, in which case the woman may view the man's dysfunction as a sign of her own inability to excite him sexually) or concern over loss of control while being orgasmic.



In a small number of women who have never been orgasmic, anxiety related to **fear of loss of control during orgasm** results in deliberate blocking of sexual arousal. Such women may voice concern about becoming convulsive during orgasm, being incontinent, losing consciousness, or having other manifestations that resemble sickness or cause embarrassment. These women often have low self-esteem and view themselves as incompetent, dependent on others and unable to control their own lives.

**Depression** is a frequent cause of impaired orgasmic responsiveness, the precise cause is not known, since libido is typically decreased in depressed women, it may be difficult to determine which is which if a true frigidity is present. Depression may be a cause of secondary frigidity but is unlikely to be the principal factor in primary frigidity, similarly, depression is unlikely to account for situational orgasmic problems.

In many instances, orgasmic dysfunction stems from **interpersonal factors** that include ineffective communication, hostility toward the partner or spouse, distrust of the partner or husband, and divergent sexual preferences. The importance of communication as a means of interpersonal relating cannot be stressed too highly; the consequences of poor communication patterns include frustration, feeling hurt, anger, disinterest and withdrawal. Many women with sexual problems have not been able to communicate their preferences for a particular type of touch, position, or timing related to sex with their partner. This inability to communicate may result from lack of learned facility in sexual communications, a feeling that it is improper for the woman to tell the man what she might like, for fear that the husband will be offended by such suggestions...

**Boredom or monotony** in sexual practices may be an important element in the genesis of secondary orgasmic dysfunction. Women who are orgasmic by masturbation but not in sexual activity with their husbands may be so because of anxieties, or probably at least as frequently, because the partner controls the initiation, timing and type of sexual activity that occurs.

In some cases, **sexual ignorance** appears to be a major element of orgasmic dysfunction, because it is surprising how many women are unfamiliar with their own anatomy or have no idea of what type of sexual activity is pleasurable for them. In other instances, misconceptions and ignorance about personal hygiene or male sexual needs become dominant elements dictating a woman's sexual behavior patterns.

### **Diagnostic considerations**

Care must be taken to identify any **organic factors** contributing to organic dysfunction. **Dyspareunia** should always be carefully investigated in a systematic fashion, since organic lesions are frequently missed on a routine pelvic examination. For example, sometimes the female sexual response during coitus is impaired by a wide and **slack vaginal entrance**. In other words, the

muscles surrounding the vaginal entry are in such poor condition that there is not enough friction between the penis and the outer one third of the vaginal wall. Indeed, neither of the partners may even feel very distinctly whether the insertion has taken place or not!. The main muscle affected is the **pubococcygeus** which is described as the master sphincter of the entire pelvic area and it runs from the pubic bone in the front all the way to the coccyx in the back. A gynaecologist by the name of **Arnold H. Kegel**, developed some **exercises** for this particular muscle which can be practiced by any woman at anytime and anywhere. The superficial muscular layer is called the **bulbocavernosus**.

### **Kegel's exercises**

The patient must learn first how to identify the muscle for herself. In order to do this, she is advised to sit on the toilet with her legs spread as far apart as possible. If she then starts and stops the flow of urine, she becomes aware of the pubococcygeus action because it is the only muscle that can stop urine under this circumstance. Once the muscle is identified, the woman can practice contracting it repeatedly whenever she has the time. She simply flexes this muscle twenty times in a row three to five times every day till it is firm. As a result, coitus becomes much more enjoyable for both partners because the contact between penis and vagina is closer. While it is true that the inner two thirds of the vaginal walls themselves contain hardly any nerve endings and therefore no feeling, the muscles surrounding the vaginal entry and the outer third of the vagina do contain nerve endings and if these muscles are firm and strong, their stimulation can be felt and enjoyed. The ability to control her vaginal muscles is bound to be welcomed by any woman who wants to make the best of her sexual relationships.

### **Diagnosis of systemic disease**

A detailed medical and surgical history, accompanied by a complete physical examination and appropriate laboratory testing, will assist in the diagnosis of systemic disease that may impair sexual responsiveness. Every woman with a history of secondary frigidity and a close relative with diabetes mellitus should have an oral glucose tolerance test. Evaluation of steroid hormone status and thyroid function tests is most likely to be beneficial for patients with depressed libido or with vaginal atrophy.

### **Combined male and female sexual dysfunctions**

In cases in which male sexual difficulties coexist with lack of female orgasmic responsiveness, it is not always possible to make a precise diagnosis. For example, the wife of a man with premature ejaculation cannot be diagnosed as having coital orgasmic inadequacy, since rapidity of ejaculation seriously hinders her opportunity for exploring coital patterns of sexual arousal. However, if the woman remains unable to have orgasms during coitus after the man's



ejaculatory control has been improved, then the diagnosis may be correctly applied. Similarly, a woman whose husband is impotent may be handicapped in her sexual responsivity in proportion to both the man's dysfunction and her own loss of spontaneity or sense of responsibility for overcoming his distress.

### **The truth about female orgasm**

Some women are unsure about whether or not they have ever experienced orgasm... In some instances, the history may reveal enough precise information—for instance, a pattern of sexual arousal culminating in rhythmic, pulsating contractions of the vagina and a general sense of relaxation and tension release—to determine that orgasm has actually occurred. In other cases, the woman's description of her past sexual response patterns is quite inconclusive; while it has been said that if a woman is not sure if she has ever been orgasmic, then she probably has not, this generalization is not always accurate. Some women have expectations of orgasm as an earth shattering event!; in these cases, which may reflect the unrealistic portrayals of female sexuality in many popular movies, magazines and books, the woman may in fact be orgasmic frequently, yet not realizing that she is...

A detailed history of each woman's ability to be orgasmic by **masturbation** is important from both diagnostic and therapeutic perspectives. Facility with masturbatory orgasm but lack of orgasm and frigidity occurring with her husband points to the likelihood of **interpersonal factors** being of primary importance. If a woman has not been orgasmic with self-stimulation or has never attempted masturbation, it is more likely that **attitudinal problems** exist that require therapeutic attention.

It may be difficult to determine whether **low libido accompanying orgasmic dysfunction** is etiologically important, (for example, as a symptom of depression, drug use, or chronic illness) or whether it has been a secondary reaction to a longstanding pattern of sexual frustration. Claims of low interest in sex may also indicate pervasive guilt associated with sexual activity or performance anxieties.

Additional aspects of each clinical situation that require careful diagnostic assessment to permit a rational formulation of treatment plans include information about the following factors:

1. Contraceptive practices and reproductive goals.
2. Sexual responsiveness in other relationships.
3. Quality of the present sexual relationship.
4. Sexual attitudes of both partners.
5. Concurrent psychopathology.
6. Previous experiences in psychotherapy.
7. Self-esteem.
8. Body-image.



## Treatment

Because of differences in the socialization of men and women in our culture in regard to sex, it is usually important to encourage the frigid woman to think of herself as a sexual being - in effect, to give her permission to be sexual!. **Cultural attitudes** putting women to a secondary role in sexual activity are discussed at length with the doctor, pointing out where these rules have influenced the particular woman developmentally as well as identifying any current constraints on sexual attitudes or behavior that originate from such **cultural conditioning**. Thus, the woman who has been taught to believe that men have a greater sexual capacity than women is informed that physiologically the reverse is true, because there is no refractory period following orgasm in women.. It is equally important as a part of therapy to correct misconceptions that men have and believe about female sexuality, which is most effectively accomplished in the context of the **conjoint therapy model**. In this format, both the male and female partners have an opportunity to see the female cotherapist openly discussing sexual matters in a knowledgeable fashion; this provides an effective model for the female patient and reinforces the concept that women can think or talk about sex. Necessarily, many details of treatment depend on the **histories, personalities and objectives of the patients**, the discussion here will focus on the components of therapy that are usually applicable.

It is important to identify each couple's sexual value system and to approach therapy within the boundaries of what is acceptable to them. Although **attitudinal change** may be necessary to therapeutic progress in some cases, doctors should refrain from imposing arbitrary values on their patients and should recognize the dimensions of each couple's **moral and sexual values**. Thus, a woman and the wife who feels that masturbation is "**dirty**" but wants to change this feelings may be counselled in ways to become comfortable with self-stimulation but a woman who objects to masturbation on moral grounds should never be urged to masturbate as a requirement of therapy.

Education is employed to provide **accurate information related to sexual anatomy and physiology**. Many women as well as their partners, are uncertain about aspects of their own sexual anatomy. Some women do not know or are uncertain about where the clitoris is; even when the anatomy is familiar to them, they may not understand changes that occur during the sexual response cycle.

Discussing the facts that direct clitoral manipulation may be sometimes uncomfortable, that vaginal lubrication comes and goes normally, and that nongenital accompaniments of sexual arousal such as tachycardia, sweating or carpopedal spasm are normal physiological responses, such discussion may be directly beneficial in certain cases.

**Sexual education** is also directed at informing both the woman and her husband about **patterns of female orgasm**. In particular, it must be stressed that the intensity of orgasm may vary considerably from time to time; the search for a

**body shaking explosive orgasm** is likely to block the acceptance of any less dramatic response as authentic. Similarly, it is usually helpful to address the erroneous notion of **vaginal versus clitoral orgasms** by explaining that all female orgasms, regardless of the source of stimuli have the same physiologic manifestations. Education should include a thorough explanation of sexual anatomy and physiology without artificially separating the biologic components of sexuality from psychosocial factors. Therefore, it should be pointed out that regardless how the body is responding, the way in which physical sensations are integrated into the subjective emotional experience of each person has a great deal to do with what is perceived as pleasurable. Factors such as **mood interfering or preoccupying thoughts** and **physical discomfort** due to feelings such as fatigue, soreness, or hunger, all contribute to the perception of the quality of a sexual experience.

**Anxiety reduction** is accomplished by several different approaches. Encouraging couples to verbalize their concerns about sex allows for a modest degree of anxiety reduction by the simple process of ventilation. **Sensate focus exercises** are employed to remove performance pressures, increase communication skills (which typically lowers anxiety by improving both competence and self-confidence) and induce physical relaxation. In addition, because anxiety may result from irrational labelling of a behavior, situation or feeling as negative or dangerous, interventions that have been termed **cognitive relabelling** are sometimes used successfully. For example, labelling a sexual encounter as a failure if it does not result in orgasm - and simultaneously reinforcing feelings of personal inadequacy by this labelling process- can obviously lead to anxiety in anticipation of sexual activity. Helping the woman to learn that a sexual experience may be enjoyable even if orgasm does not occur is likely to contribute to a reduction in anxiety and a subsequent increase in sexual responsivity.

Anxieties about sex often derive from the notion that sex is in a category completely apart from all other aspects of our lives. The process of cognitive relabelling can be facilitated by using analogies drawn from nonsexual aspects of life to indicate the unrealistic nature of many expectations women (and men) have about sex. For example, if a couple is concerned because the wife is not **"ready"** for sex just when her husband is, they might be asked if they only sit down to a meal when both have an equal appetite. The nonsexual analogy might be developed further by stating: "If one of you is hungry and the other is not, you might join each other at the table; then, if your appetite develops you are free to decide if you wish to have a meal"... Many women are concerned that even a slight degree of physical intimacy (a hug, a kiss, cuddling), will be taken by the man as a signal to progress to intercourse!. In this situation, the woman might be asked if it is not ever possible to have a bowl of soup or a salad without having to eat a complete dinner. The concept behind such examples, of course is to highlight the inflexibility and irrationality of **certain maladaptive sexual beliefs**, while pointing out that common-sense principles that the patient often uses on her own can be equally applicable to sexual situations.



As mentioned previously, **sensate focus** provides a frame-work for reducing anxiety, increasing awareness of physical sensations and transferring communication skills from the verbal to nonverbal domains. While one important aspect of these processes derives from specifically altering previous sexual habit patterns by initially prohibiting genital or breast stimulation, another point of significance involves specific skills in nonverbal communication that are taught to the couple through the slight pressure of their touching hands. This exercise facilitates the concept of sex as a matter of mutual participation - not something the man does "to" or "for" the woman!....

Using such **nonverbal messages**, a hand can be moved from one spot to another to know what kind of touch, at what location and for how long. As such, the woman is able to explore her own sensations, since the goal is not to produce an orgasm but to identify and discover interesting or pleasurable sensations. As the woman becomes more knowledgeable about her own body, she is better able to convey her feelings and needs to her husband. In this regard, it must be stressed to both patients that it is not the man's job to make or force his partner orgasmic, although this is frequently the attitude couples have prior to beginning treatment. A man is no more able to make a woman orgasmic than he is able to make her digest her food!... Orgasm is a natural psychophysiologic response to the build-up of neuromuscular sexual excitation; when the body is allowed to function in a positive emotional matrix (unhindered or impeded by anxiety, anger, or excessive cognition) orgasm will occur spontaneously.

Except in the case of a woman with primary orgasmic dysfunction, the use of **vibrators** as a **sexual aid** in sex therapy is problematic and inadvisable for several reasons (refer to the chapter of masturbation and the use of sexual aids). First, the intensity of physical stimulation delivered by the vibrator cannot be duplicated by the man. Second, the use of the vibrator may alarm the woman if she perceives it as unnatural and abnormal. Third, use of the vibrator may have a distracting effect on the couple- either one or both partners may view it as reducing their intimacy. Finally, repeated use of a vibrator for long time may result in a degree of either psychological or physical dependency on this device as the only possible source of orgasmic release.

If the couple can learn to interact sexually by focusing on their feelings, communicating openly together, and avoiding routinized sexual patterns, orgasm is likely to occur. In fact, women often are told that orgasm may occur when they least expect it; the fact being of course that pushing to reach orgasm is much more likely to inhibit overall sexual responsiveness.



## **Sensate focus (sexual foreplay)**

The basic themes of sensate focus are:

Explore feelings without a goal, communicate openly, assume responsibility for yourself, not for your partner and the female superior position is utilized. The woman is asked to start intercourse only if she feels ready for it, (both mentally and physically); thus having intercourse is not assigned. The husband is told to continue touching during intercourse, with guidance from his wife as to what feels pleasurable. Clitoral stimulation may be employed during coitus as a means of additional sensory input to facilitate orgasmic responsiveness. Depending on the individual circumstances of each case, the woman may be asked to experiment with **fantasy** during sexual play and **precoital petting**, particularly if she has difficulty freeing herself from distracting thoughts.

Using these methods, an overall failure rate of 20.8 percent in a series of women with orgasmic dysfunction who were **not circumcised** was reported by Masters & Johnson.

## **Religious view**

Many years ago, our Prophet Mohamed described precoital petting beautifully through his following advice:

قال رسول الله "صلى الله عليه وسلم":

"لا يقع أحدكم على امرأته كما تقع البهيمة، وليكن بينهما رسول - قيل وما الرسول يا رسول الله ؟ قال: القبلة والكلام".

\* رواه أبو منصور الديلمي في "مسند الفردوس" عن أنس رضي الله عنه في كتاب إحياء علوم الدين للإمام الغزالي.

## **Sexological analysis**

The words of our Prophet indicated and proved very important and sensational facts concerning female sexuality ...

1. Coitus without precoital petting is animal like.
2. Coitus not preceded by sexual foreplay is unadvisable because it will not be satisfying to the wife.
3. Kissing (light and deep) between husband and wife is an excellent method of communication (non-verbal).
4. The mouth and tongue are very important secondary erogenous zone in both males and females.
5. Love talk between husband and wife is appreciated by all females and evidently it is a successful way of verbal communication.

## **In conclusion**

The overall analysis of such very concise but marvelous sexual advice is to achieve a satisfying orgasmic coitus and hence the absence of coital anorgasmia afflicting many of our circumcised wives nowadays.

It is a well known fact that mutual sexual satisfaction in marriage is of paramount importance during the wonderful stability of such sacred bondage between males and females. As a matter of fact our God stated the following in the Kôran:

بسم الله الرحمن الرحيم

"ومن آياته أن خلق لكم من أنفسكم أزواجا لتسكنوا إليها وجعل بينكم مودة ورحمة"

"سورة الروم"

As such, a lot of marriage failures, divorce, adultery and even polygamy could be easily avoided by following and carrying out these scientific, medical and humane traditions of Islam concerning our wives and their important rights in marital relations.

## Important Facts Concerning Women's Sexuality

It is worth remembering some facts concerning women's sexual relations in general, namely, direct sexual interests i.e. coitus or masturbation are of far less concern to females than to males. Thus, females can live more easily without sexual activity, they think less about sex and are much more readily deterred from it. In general, females cherish emotional relations far more than sex, while puritan love is their dream. They do require a very individual approach sexually before they are likely to be fully aroused because they are liable to have great variations in their erogenous zones. By far, it is not straight-forward erotic desire that usually motivates females towards sexual activity, but a feeling of being needed, admired and preferred is often much more important. Hence, most women are greatly stirred emotionally by courtship and personal attentions e.g. birth-day presents, gifts and love talk and failure to do so is exceedingly common on part of the husbands with consequent marital disharmony and sexual failures... Many women do prefer the initial caressing and the elaborate precoital petting especially if the husband is experienced well with the various erogenous zones of his wife's body. Women actually enjoy this sex play sometimes more than the actual coital act; contrary to the male impulse of penetration and impregnation. If the woman lacks the capacity for orgasm the husband should avoid her criticism because it means doubting her affection and devotion, since physical pleasure is by no means a measurement of her love and should not be so judged. It is interesting to note that some females could achieve an orgasm while listening to a musical concert!, while others get wet in the presence of their beloved...

### Phases of increased sexual urge

In females as a whole, there are phases of increased sexual desire at different times related to their menstrual cycle. As a matter of fact it has been proved recently that there is an increase in female initiated sexual activity at the time of ovulation exactly like some female animals on heat. Obviously this rise in sexual desire becomes less premenstrually, then it diminishes during the menstrual flow and becomes least after menses. A wise lover should take a good advantage at these times... It is worth noting as well, that during the premenstrual phase, sexual and ordinary crimes of violence are recorded mostly during this period. In females with **pronounced premenstrual syndrome**, committing suicides, divorce and home troubles are prevalent during this critical period. Males should be warned that female breasts get engorged and become tender during this phase, as a matter of fact some women and girls too, do complain severely of this phenomenon during the premenstrual phase of their cycle. Naturally, the fondling of these tender breasts during sex play should be avoided by their husbands. Vaginal lubrication or moistening is a must for a normal act of penetration and coital activity but if it is deficient, artificial lubricants should be prescribed. Vaseline or grease are most unsuitable for this purpose but a water soluble jelly is the answer for this problem, artificial lubrication should be applied to the vaginal outlet or to the glans penis and not in excess. Saliva is most efficient especially for purposes of fertility enhancement, since, the enzyme



amylase has been proved to enhance the motility of the sperms as well as the enzyme hyalorinidase. A practical example worth mentioning is that the mounting of a bitch on heat by the male dog is always preceded by the elaborate deposition of saliva during the act of precoital sniffing.

## Vaginismus

### Terminology

Vaginismus is a condition of involuntary spasm or constriction of the musculature surrounding the vaginal outlet and the outer third of the vagina, (Fig. 33). This psychophysiologic syndrome may affect women of any age, from the time of earliest attempts at sexual activity to the geriatric years, and may vary considerably in severity. The most dramatic instances of vaginismus often present as unconsumated marriages since penile insertion into the vagina may not be possible due to spasm, resistance and attendant pain. At the other end of the clinical spectrum are cases in which coitus is possible but painful. The frequency of vaginismus among females is so far not recorded statistically but gynaecologists are quite familiar with it. Although the woman with vaginismus may be quite fearful of sexual activity, thus limiting her sexual responsiveness, more commonly women with vaginismus have little difficulty with sexual arousal. Vaginal lubrication occurs normally, noncoital sexual activity may be pleasurable and satisfying and orgasmic responsiveness is often intact. Females with vaginismus usually have normal libido and are distressed by their inability to participate pleasurably in active coitus.

### Etiology

Vaginismus may arise from a natural protective reflex to pain originating from any lesion of the external genitalia or vaginal introitus. The percentage of cases of vaginismus that are initially attributable to organic problems of this type is not certain; one difficulty is that repeated episodes of such pain may produce a conditioned response so that even if the original lesion heals spontaneously or is eliminated by proper medical therapy, the vaginismus may remain. Thus, a woman who initially experiences vaginismus in association with a poorly healed episiotomy may continue to be dysfunctional after the perineal and vaginal tissues have healed normally. **Transient or subacute vaginismus** in association with pelvic pathology often does not require psychotherapy but **chronic vaginismus**, even if it is attributable to organic processes usually requires such treatment.

### Organic causes

Among the frequent organic causes of vaginismus are **hymenal abnormalities**, including remnants of the hymen that are stretched during attempts at vaginal penetration, **genital herpes** or **other infections** that cause ulcerations near the opening of the vagina or on the labia, **obstetric trauma** with painful episiotomy; and **atrophic vaginitis**, not forgetting complicated circumcision operations e.g. **tight introitus** and **entangled neuroma**.

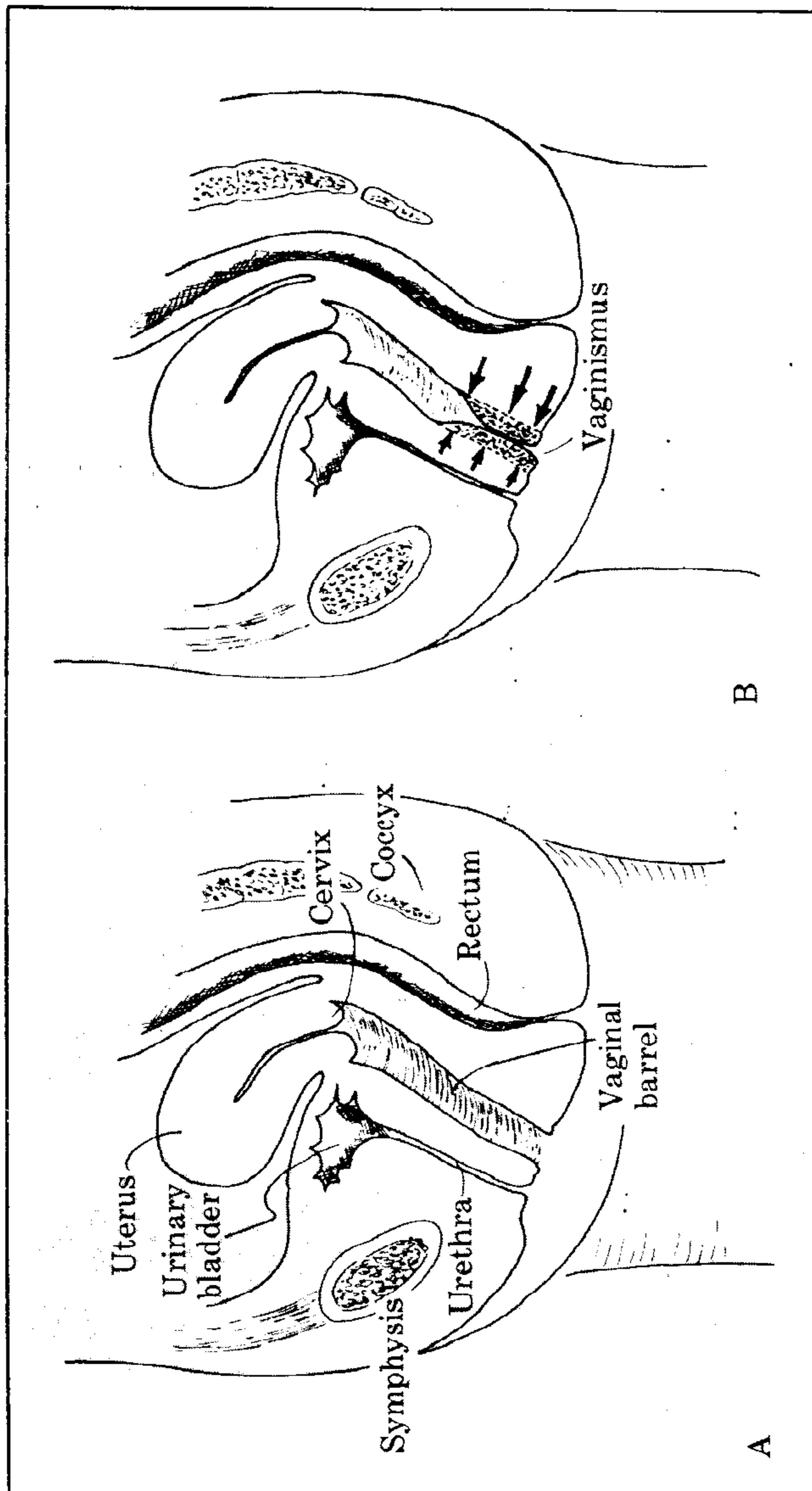


Figure 33. (A) Normal female pelvic anatomy.  
(B) Vaginismus, showing involuntary constriction of outer third of vagina.



## Psychosocial factors

More commonly however, no organic cause can be implicated as the cause of vaginismus. In these cases, a variety of psychosocial factors may be operative. There appears to be more than a chance association between a background of negative conditioning to sex fostered by intense childhood and adolescent exposure to **religious orthodoxy** and the later occurrence of vaginismus. It should be emphasized that the development of vaginismus (or any sexual dysfunction) from this background has little to do with the specific theological content of religious upbringing; rather, the major difficulty seems to stem from the rigid often wrong thinking that regards sex as **dirty, sinful and shameful**. This background pattern is frequently encountered in women with unconsummated marriages, and indicates that they have difficulty in making the psychic transition from viewing sex as evil (premaritally) to viewing sex as good (upon marriage). Interestingly, women from such backgrounds often marry men of similar upbringing and a high incidence of secondary impotence has been found among such couples when the woman has vaginismus.

Vaginismus may also stem from a severely **traumatic experience**. Although this etiology is seen most typically in the case of women who were raped during childhood or adolescence, the occurrence of rape at any age may precipitate a subsequent pattern of secondary vaginismus, even when previous sexual function had been well established. Vaginismus may also occur as a consequence of traumatic sexual experiences other than **rape**. **Incest, repeated sexual molestation as a child, or a pattern of psychologically painful sexual episodes at any age** may predispose to this condition.

Other factors that may be important in the genesis of vaginismus include; **homosexual orientation**, traumatic experience with an **early pelvic examination**, **pregnancy phobia**, **venereal disease phobia**, or **cancer phobia**. The precise role of negative maternal conditioning in regard to menstruation, **reproduction and sex** has not been carefully explored but may sometimes be a factor in the subsequent development of vaginismus.

## Treatment

The diagnosis of vaginismus can be made if involuntary spasm or constriction of the musculature surrounding the outer portion of the vagina is detected. If this diagnosis is made it is not usually necessary to go on to a more detailed pelvic examination at this time, including deep palpation, insertion of a speculum and obtaining Pap smears or vaginal cultures. These procedures can be performed a day or two later, once the patient and her husband have been educated about her condition thoroughly. Because many patients who may have vaginismus are extremely fearful of having a pelvic examination, some gynaecologists conduct such an examination under general anaesthesia. Although this procedure may be helpful in detecting organic pathology that would otherwise be difficult to identify, the muscle relaxation induced by anaesthesia makes it impossible to diagnose vaginismus even if it is present.



A second pelvic examination is performed with the woman's consent, her husband is present in the examining room so that the nature of the involuntary constriction about the vagina can be demonstrated to both partners. The woman is encouraged to watch the examination in a mirror held by a medical assistant. The purpose of this examination apart from allowing the woman to become accustomed to the physical contact and to realize that nothing is being hurried, is to introduce the use of a series of graduated **vaginal dilators**, named after Fenton's (Fig. 34). These dilators are made of glass, porcelain or better plastic and they will be used to reprogram the maladaptive muscular constriction of the vaginismus response. If voluntary guarding occurs among the muscles along the interior of the thighs or along the perineum, care should be taken to discuss the problem furthermore and to use other techniques such as breathing exercises. Over several sessions, the woman is taught how to relax her pelvic muscles after voluntary tightening for 3 to 4 seconds, and then let go. The contrast between deliberate, **intense voluntary muscle constriction** and the unavoidable degree of relative relaxation that occurs when the woman is no longer straining to hold her pelvic muscles in contraction is the simplest and most effective way of providing an active means for the woman to gain a degree of pelvic relaxation. The gynaecologist, with the consent of the patient, gently and slowly introduces the well lubricated dilator No. 1 into the introitus just as his finger is withdrawn with a slight posterior pressure. The dilator is inserted at a slight angle, with its tip aimed toward the coccyx; and it is important to move the dilator very slowly and gently.

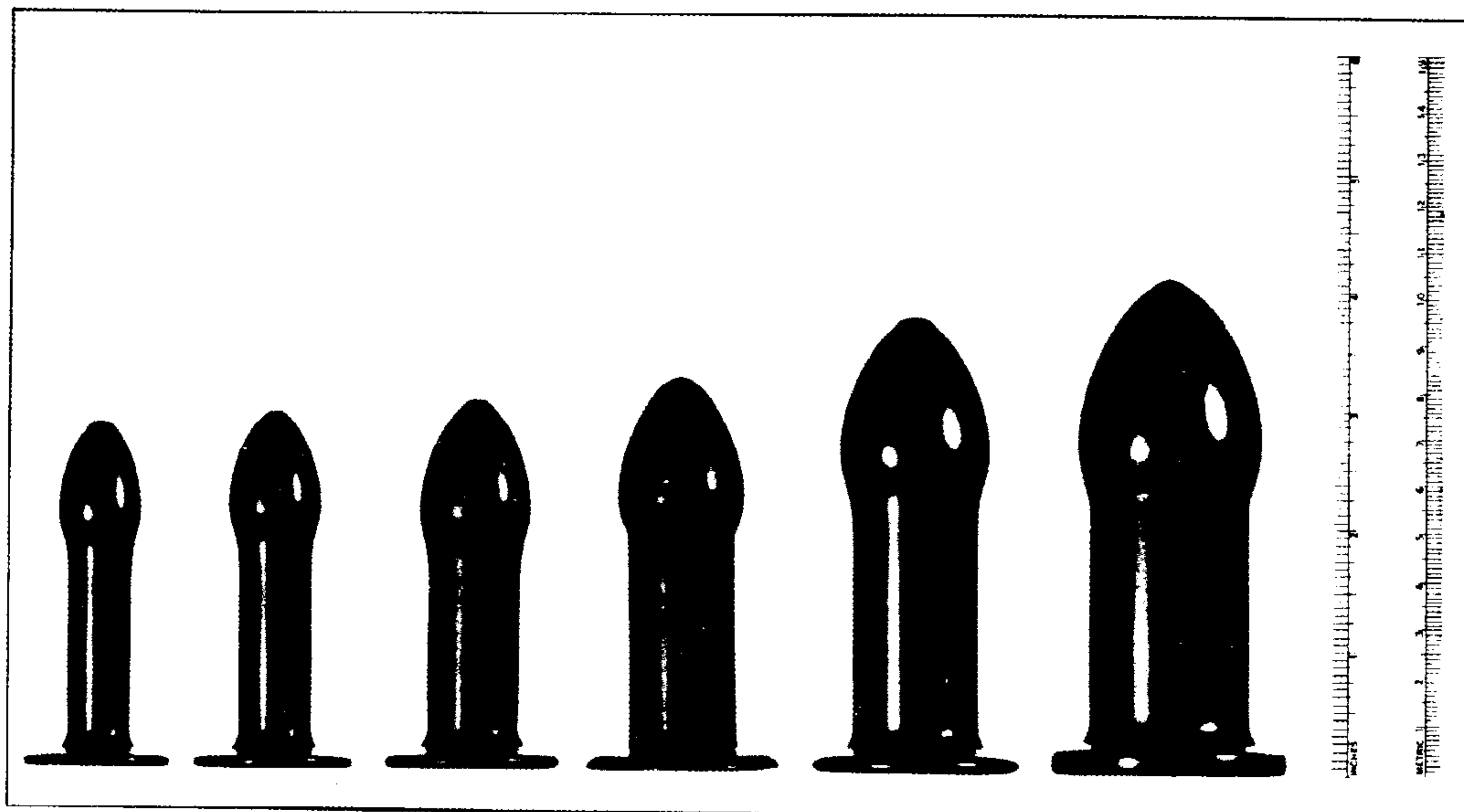


Figure 34. Plastic dilators used in the treatment of vaginismus. The dilators (from smallest to largest) are nos. 1, 1½, 2, 3, 4 and 5.

Depending on the severity of vaginismus, the emotional state of the woman and the ease with which it is able to insert the No.1 dilator, the procedure is repeated by herself or by the physician leaving the dilators intravaginally for 10 to 15 minutes. More than 90 percent of the time, the woman is able to accomplish intravaginal insertion of the dilators easily, this procedure is then repeated several times to allow her to gain confidence and experience. Needless to say any pelvic pathologic condition that is detected should be appropriately treated and by the time the woman is able to insert the No.4 dilator comfortably and assuming that the husband is having reasonably normal erective function, the couple is able to make the transition to coitus. **The female superior position** is always suggested for this purpose to allow the woman the greatest degree of freedom of motion and control. She is instructed to insert the penis just as she has been doing with the vaginal dilators; including the use of an artificial lubricant applied to the penis if she wishes.

Necessarily, particular issues related to either the etiology of the vaginismus or to marital discord, negative sexual attitudes, poor self esteem or similar factors must be dealt with during the course of treatment since it is not a simple mechanical process of dilatation. With this type of **combined approach**, vaginismus can be reversed in all motivated patients except those who have an irreversible organic pathological condition underlying the problem.

# 9

## **SEXUALITY AND FEMALE CIRCUMCISION (FEMALE GENITAL MUTILATION)**

- **Terminology and History.**
- **Immediate and Delayed Complications.**
- **Sexological analysis.**
- **Medical Opinion.**
- **Anatomical and Physiological Sexual Dysfunctions.**



# SEXUALITY AND FEMALE CIRCUMCISION

The term “**female circumcision**” is confusing, because it is often applied to a wide variety of female genital surgeries. Originally, anthropologists categorized a number of different clitoral operations performed in primitive societies under the umbrella term, **female circumcision**. It is important therefore to define the term accurately. As defined medically, female circumcision is similar to its male counterpart and when it involves cutting off all or part of the clitoral foreskin also called prepuce or hood. This surgery is employed by very few Third World societies and is called female circumcision (Fig. 35).

## Terminology

Far more often in the Third World especially in Africa and the Middle East, when the clitoral foreskin is removed part or all of the clitoris is also cut off. This is called clitoridectomy or excision. In many underdeveloped countries, as an obligatory, religious or puberty rituals clitoridectomy is further extended to include the cutting away of part or all of the small or large labia. The most drastic operation includes all of the above plus sewing up the genital area (Infibulation). This is known also as (Pharaonic circumcision). The extent of the surgery involved varies from country to country and from one ethnic group to another within a given country. Their net effect and aim is the reduction or suppression of the sexual pleasure of these future women !...

## Types of surgery

The following list gives the medical term for each surgical procedure:

- Cutting of all or part of the clitoral foreskin = circumcision.
- Cutting off part of the clitoris = clitoridotomy.
- Cutting off all of the clitoris = clitoridectomy.
- Cutting off part of the labia = partial vulvectomy.
- Cutting off the entire labia = complete vulvectomy.
- Cutting off all the external genitalia and suture it = Infibulation.

## History

As in the case of male circumcision, no one knows where, when, how or why the various female surgeries began. They were known in antiquity and according to some researchers and folklore, may even predate male circumcision. Speculation as to the origin of and reasons for this primitive genital surgery is rather fruitless. Clitoral surgery has been employed for hundreds if not thousands of years. It has been estimated that at the present time there are around 160 million women who have undergone clitoridectomy in Africa alone, and in dozens of other places throughout the world...! (WHO report).

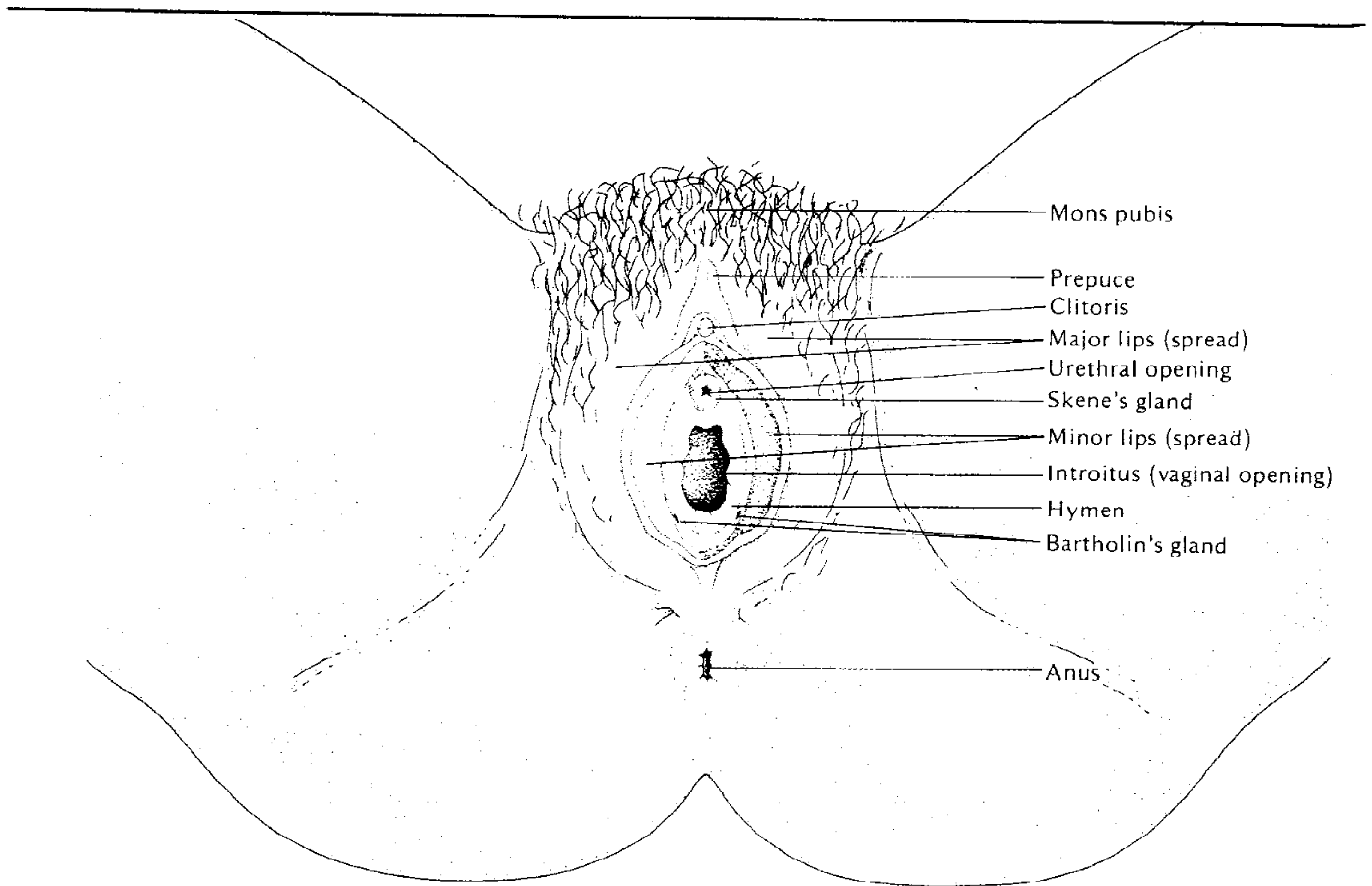


Figure 35. Normal external genitals of the female

Proponents of clitoridectomy present the surgery in a positive light; Jomo Kenyatta, the late western-trained leader of Kenya, not only encouraged the surgery but also wrote of it in such glowing terms in his thesis at the London School of Economics described the operation (1962):

**[The operator... takes out .... the operating razor .... and in quick movements, with the efficiency of a Harley Street surgeon proceeds .... with a stroke ..... cut off the clitoris].**

In 1972, a French physician provided a very different picture of pharaonic circumcision as currently practiced in Somalia. (It takes a strong stomach even to read the description)...

“After separating the outer and inner lips (labia majora and labia minora) with her fingers, the old woman (Daya) attaches them with large thorns onto the flesh of each thigh. With her kitchen knife the woman then pierces and slices open the hood of the clitoris and then begins to cut it out. While another woman wipes off the blood with a rag, the woman digs with her fingernail a hole the



length of the clitoris to detach and pull out that organ. The little girl screams in extreme pain, but no one pays the slightest attention. The operator finishes the job by entirely pulling out the clitoris and then cuts it to the bone with the kitchen knife. Her helpers again wipe off the spurting blood with a rag. The woman then lifts up the skin that is left with her thumb and index finger to remove the remaining flesh. She then digs a deep hole amidst the gushing blood. The neighbor women who take part in the operation then plunge their fingers into the bloody hole to verify that every remnant of the clitoris is removed"..... Thousands of women and girls have died or sustained serious injuries or infections as a result of such wild surgery...

The photographer (a Greek lady), of my movie film entitled: "Female Circumcision in Egypt", fainted all of a sudden while photographing the circumcision procedures performed by a native Daya in Ain Shams district near Cairo, 1972.... In Minneapolis, U.S.A. (1982), my film was shown in the "International congress on family sexuality", it is sad to report that quite a number of the feminine audience left the show room unable to continue watching the cruel operations presented in my film.

Proponents of clitoridectomy established a medical rationale, describing a non-excised woman as unclean; the clitoris is said to interfere with menstruation, childbirth, and impregnation, and is considered the cause of impotence in males!. In sum the clitoris is dirty, dangerous and disgusting; by far, the most important "medical" reason for clitoridectomy is the claim that the clitorises of the Third World women if not cut off, will grow to monumental proportions... One early traveler in Ethiopia, (where infibulation is practiced widely) described the clitoris in its natural state as being as, "long as a goose's neck"!. Few carried this exaggeration to that extreme...

What man in his right mind would want to marry a dirty, ugly woman who was sterile and who would make him impotent?. Jomo Kenyatta wrote that "No Kikuyu man would think of marrying an uncircumcised girl". I was not surprised to know of this statement, because many of our Egyptian or Sudanese men would equally say the same up till this moment... But Kenyatta and many others added another important aspect, clitoridectomy was said to subdue sexual urges and make the woman more faithful. The reduction of female sexuality was, and is an important element in the acceptance of female circumcision in our society and in underdeveloped countries as well.

There is no doubt that female circumcision and various clitoridectomy procedures described continue to be practiced up till now, because it is said that Islam "tolerates female circumcision", which of course is not true. Up till the year 1977, 90% of Somalian teenagers had undergone pharaonic circumcision including infibulation. Many Westerners have been shocked by this mutilation of women and have protested against the practice. Recently, women in many parts of the world including Egypt have protested this ritual. They are struggling against these cruel practices in their own countries and in the international arena.



The elimination of (centuries-old) practices, especially those that are degrading to women, is often a difficult and protracted effort. It is interesting to note historically that there are some similarities between African clitoridectomy and Jewish circumcision practices. In Ethiopia for example, it is startling to note that the operation on girls is performed on the eighth day while in some areas of Nigeria the clitoris is nicked, i.e. incised or notched not ablated, only to draw blood following a Jewish custom. In several countries, the infant is named after the excision ceremony. Whether these similarities are simply coincidences or a reflection of a common origin is unknown.

The World Health Organization (W.H.O.) had a seminar on clitoridectomy and infibulation in Khartoum, Sudan in 1979, realizing the dangers of the operations and its complications, under the title "**Traditional Practices Affecting the Health of Women**". Most of the male delegates wanted the circumcision practices and argued that the surgery should be done in hospitals. The women delegates were adamant in calling for total discontinuance of the practices. Although the attendance was sparse (10 countries) only, resolutions were passed calling for the abolition of all female genital mutilation. This does not mean that such surgeries will cease forthwith, but it is at least the first step by the (W.H.O.) to eliminate the practices. Many groups who practice female circumcision believe it to be analogous to male circumcision, but this is far from the case.

In 1994, the (ICPD) was held in Cairo (**International Congress for Population and Development**); two related hot issues were discussed and documented, namely; female circumcision, agreed to be named **Female Genital Mutilation (FGM)** and sex education as well as reproductive health. The non-governmental organizations (NGOs) joined hands to gain national and international support for their efforts to deal with these two major problems to protect our young girls and women of the future against this discrimination.

## Reasons given

Excision is practiced to reduce or extinguish sexual sensitivity in girls, it is traditionally performed just before marriage "in order to preserve the family" and assure faithfulness of wives in Sub-Saharan Africa. While in Egypt, Sudan, Ethiopia and Somalia the age of operation is variable, from few days after birth till the age of puberty. Moral behavior of females is often given as a reason. The operation traditionally was connected with puberty rites, however there are many puberty rites that do not include excision. Most Africans who practice these operations believe that excision is a custom decreed by the ancestors, therefore it must be complied with. Most often men refuse to marry girls who are not excised. Since marriage is still the only usual career for a woman in most parts of Africa, the operations continue. Excision is also perceived as a way to increase fertility and the wish of most women is to have as many children as possible. It is widely believed in Mali and all over west Africa, that the clitoris ~~controls~~ and imply maleness, while the prepuce of the penis means femaleness!. Hence, both have to

be removed before a person can be accepted as an adult in his or her proper sex in society.

Excision operations are at present practiced in the modern sector in addition to the backward villages or towns including the cities throughout East and West Africa. Fathers who make the decisions insist on the operations, as they believe that their daughters will not be marriageable if they are not operated upon. It is also believed that a girl who is not operated will run wild and disgrace her family. The wrong belief among both Moslems and Christians, that their religions favor excision is another element that bless and encourage the performance of this practice, no wonder, the mildest procedure which is called "Sunna or traditional circumcision", involves removal of the prepuce and tip of the clitoris or only part of it.

### **Geographic distribution (Fig. 36)**

**Excision** is practiced in a broad area all across Africa parallel to the Equator, from Egypt, Ethiopia and Somalia, Kenya and Tanzania in East Africa to the West African Coast, from Sierra Leone to Mauritania, and in all countries in between including Nigeria.

**Infibulation** is practiced on all females, almost without exception in all of Somalia and whenever ethnic Somalis live (Ethiopia and Kenya). The operation is performed on much younger children than excision, usually on four to eight year old girls long before puberty with no ritual ceremonies. In the Sudan, infibulation traditionally is called "Tahur", similar to the Arabic word applied among Egyptians which means cleansing or purity. It is performed at a family and neighborhood gathering of women in the most populous areas of the Sudan, including the capital Khartoum and Omdurman, all along the Nile valley. It is interesting to mention that the knife used often by the operator is called "The knife of honour"...

In West Africa, infibulation is documented at the present time in Mali by several Moslem population groups, though the practice goes back to pre-Moslem times. Intentional infibulation is said to be decreasing in Mali, a medical source states that infibulation is also practiced in Northern Nigeria (Moslem area). A country by country estimate adds up to more than 160 million women circumcised already, even though the figures of several countries in Central Africa are not yet available and therefore are not included. For instance, Nigeria has well over 100 million people if only half of the women are operated, this would mean 25 million females in Nigeria alone. Documentation shows that the majority of the female population in most Nigerian states are excised. In Sudan, Upper Volta, Mali, Kenya and Ethiopia, more than three-quarters of the female population are operated upon, this means many millions more. Almost all of the female inhabitants of Somalia, more than 11.5 million women are infibulated. In Egypt, one of the most populous countries in Africa, about 93% of the group of women investigated were circumcised, the percentage reported here holds good



with other statistics documented by different investigators. It is estimated that about half of the Egyptian girls continue to be excised up till now. No estimate can be made at present of the actual number of women and children operated upon in Indonesia and Malaysia, nor how many women and girls are involved in the South of the Arab Peninsula and along the Persian Gulf. Latest national demographic study reported in 1995 that 97% of women in Egypt were excised between the ages of 15-49 years!...

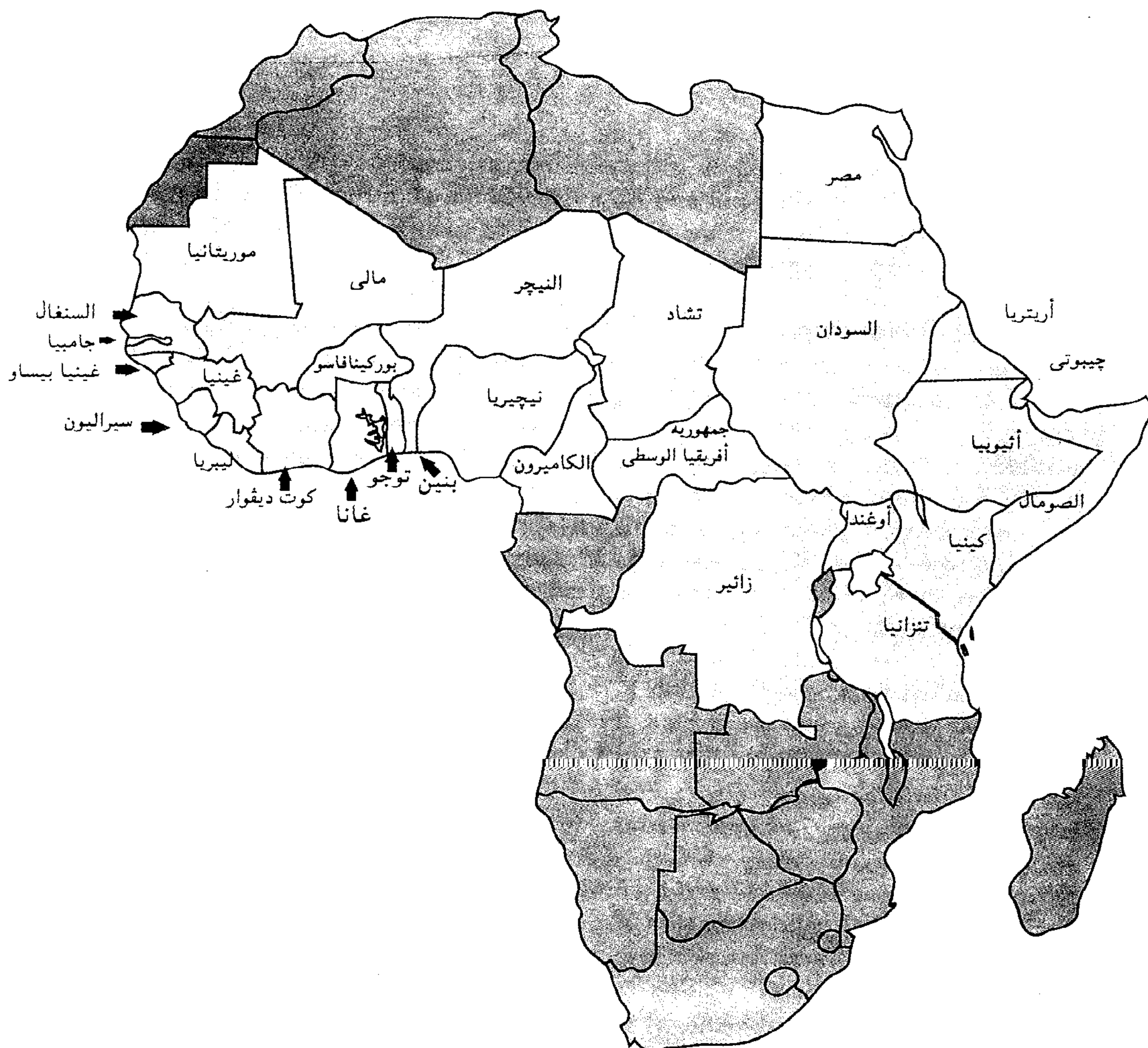


Figure 36. African countries performing (FGM) (In white).



## Complications of the Operation

Until quite recently, these variable mutilating operations were ignored by the medical profession and by governments of the countries in question, even in countries which had maternal and child health government entities. Concerning the damage to the physical health and psychological well being of women and young girls who are operated upon usually by non-medical personnel, who perform the surgery with non or limited surgical experience is severe and profound.

### I. Immediate complications

- **Primary fatalities** resulting from bleeding especially when the haemorrhage is uncontrolled, quite common due to severing of the dorsal artery of the clitoris. Many young girls must have lost their lives due to the **bleeding**, unless transferred to a blood transfusion center or hospital.

- **The shock** sustained during the surgery and after is profound because the little girl is operated upon without anaesthesia or even analgesia. She is usually overpowered, her screaming and agony are neglected and if the haemorrhage is severe the state of shock is paramount. Except for very few lucky girls who are operated upon by proper medical staff and under general anaesthesia, the fact is that the majority or nearly all of the young girls are operated upon without any anaesthesia.

- **Pain** is felt severely, because the clitoris and the labia minora are among the most sensitive parts of the genital external organs; when excised usually by crude and primitive instruments such as an old razor blade, kitchen knife or even a piece of glass, the **trauma** is immense!. Recognizing the potential dangers of pain and trauma only recently, the statements made repeatedly during the past 100 years that circumcision pain is of minor significance and that circumcision trauma is of no consequence, are to say the least of great medical concern nowadays.

- With increasing attention to the knowledge of sexual development, evidence has emerged that both circumcision pain and the **psychological trauma** inflicted may well be matters of grave effect in later development of these unfortunate girls.

- **Infection of the wound area** is quite common, since no proper sterilization or aseptic surgical technique is used. **Septicaemia** is reported sometimes, as well as fatal cases of **tetanus** and **maduromycosis**. **Ascending infection** apart from the local sepsis do occur in a number of cases leading to undiagnosed chronic cases of **adnexitis**, with possible **tubal damage** which may lead to infertility in the future.

- **Acute retention of urine** do happen because of the burning sensation when urinating, trauma to the adjacent tissues, reactionary oedema and early infection; all these factors predispose to such a common complication.

- **Accidental injury to the genital tract** is encountered sometimes because the girl being non-anaesthetized struggles powerfully to run away from this ordeal. Trauma is reported as a result sometimes to the urethra, anus, vulva and vaginal introitus with additional complications especially if the operating woman is weak sighted or not skilful. **Bartholin cysts** are reported when the glands duct is injured or due to local infection.

- In some areas of West Africa, the operator (possibly a quack or an old native woman), throw dust, sand or dirt on the wound area to stop the bleeding if it is troublesome!. Ashes, pulverized animal faeces, powdered coffee granules are sometimes used to pack the raw area of the wound in order to control the bleeding... with evident local infection of the wound.

- The local treatment applied to the wound in these backward communities increases the damage and risks of the operation and may lead to **failure of the wound to heal altogether**.

- A number of cases were reported in the medical literature, including few cases discovered and reported by myself in the infertility clinic, Ain Shams Hospitals, where a **small penis was excised wrongly**, because it was mistaken for a large clitoris by an ignorant operator. An unfortunate mistake with subsequent dramatic sex role confusion in adulthood played by the victim...

## **II. Delayed complications**

That female circumcision entails risk is not a debatable question, it is a fact. Any surgical procedure, no matter how simple carried with it **some risk** minimal to be sure- but risk nevertheless, that is very true when performed in hospital and performed by a qualified surgeon. But because this female genital mutilation is nearly always operated by non-medical women (Daya), barbers, quacks and many others a wide variety of serious complications are related and medically documented.

### **Long range physical complications**

#### **I. Gynaecological complications**

- **Chronic urinary infections** are common among women suffering from the severe types of genital mutilation, such as infibulation and excision circumcision, **dysuria** is a frequent complaint.

- **Vaginal calculi** are formed sometimes in the posterior fornix as a result of the obstruction of the proper flow of the stream of urine and retention of part of this urine in the vagina due to the abnormal scar tissue formed.



- **Chronic pelvic inflammatory disease** was reported among a good number of females who were unfortunate to sustain a spread of infection from the site of wound due to the absence of proper medical care.

- **Labial adhesions** and **vulval scarring** are frequently met with, following most of the circumcision operations due to infection or as a result of a clumsy technique.

- **Dyspareunia** (painful intercourse) is a frequent complication when penetration is performed during coitus among these women.

- **Painful entangled neuroma** in the scar tissue.

- **Keloid and scar formation** are common among the drastic types of genital mutilation such as Sudanese circumcision, a **painful scar** is a common cause of dyspareunia as well as a **tight introitus** if excision is complicated or severe.

- **Inclusion cysts of the clitoris** are often the result of clitoridectomy or clitoridotomy, the cysts vary in size, sometimes getting infected and may reach a large disfiguring size that require surgical interference.

- **Vaginismus** is reported by gynaecologists, often among females who sustained psychological and / or organic complications of the operation.

- Sometimes performing a simple **vaginal examination** is a painful procedure to some circumcised patients, while it is impossible even to put a vaginal speculum when needed due to excessive scarring.

- **Catheterization** of the urinary bladder is so difficult sometimes especially during labour. The changes in the anatomy of genital area produced by the scar tissue and malformations are numerous and **disfiguring**.

- **Haematocolpos and haematometra** were reported by gynaecologists as a result of closure of the vaginal introitus in severe cases of the operation due to scar tissue formation.

## **II. Obstetrical complications**

- **Difficulties in child-birth** are often met with, causing damage to both the mother and the baby, especially reported among primiparas. In cases of complicated excision and infibulation, the following complications are described; **delay in labour** and a prolonged second stage because the hard circumcision scar tissue usually fails to dilate and as such, holds the head of the baby back delaying the labour.

- In cases of infibulation, unassisted child-birth is nearly impossible, if there is no one at hand to cut the infibulation scar tissue in time, some cases were



reported where the **head ruptured out of the anal opening!** leading to **complete perineal tear...**

- Circumcision scar tissue easily tears during prolonged labour, unless surgical interference is introduced, causing **extensive perineal tears and bleeding** with possible **injury to the urethra.**

- Cases of **obstructed labour** are reported and **uterine inertia** sometimes lead to **brain damage** of the foetus or to the **loss of baby** completely.

- Formation of **vesico-vaginal** or **recto-vaginal fistulae** are known to result due to obstructed labour, with consequent urine incontinence. This mishap makes the women outcasts to their husbands and families even their society, as they are continuously dribbling urine or faeces.

### **III. Psychological complications**

- The psychological effects of sexual castration often done at a very young age, on the personality development of a female has been quite ignored in the past. Yet, the permanent deprivation of a human being's most powerful instinct, while forcing her to serve the sexual satisfaction of her husband must have **adverse permanent psychological results.**

- An **inferiority complex** or **mutilation complex** due to the actual loss of part of their external genitalia is found among some of the educated women and those of the high socio-economic group who were subjected to the traumas of these operations while they were young and helpless. They actually admit feeling inferior to women who were not circumcised.

- The effects of the **excruciating pain** inflicted during the circumcision process to which often very young girls are subjected by their own families or in other words, by those they love and trust have to date been quite ignored.

- The harmful effects of the **genital trauma**; of fear, the bleeding, the extreme pain and prolonged sufferings in the genital area have been investigated recently by many authors, with no doubt it was found that it did create **deep psychological wounds** as well as the visible physical ones.

- Severe **traumatic psychological damage** occurs often due to sexual violence and physical assault during the **forcible intercourse**, to which very young brides are subjected to, by some husbands who have acquired their services in return for a brideprice... Many cases of **bleeding young brides** with their genitalia torn apart as a result of the sexual attentions of their clumsy husbands are recorded in Ethiopia and Nigeria. Some **suicidal attempts** by young women, unable to cope with the ordeal of painful intercourse and childbirth, have been reported in Upper Volta medical literature.

- **Depression and psychotic disorders** were reported among some women during adulthood especially if they are suffering from chronic non-resolved **sexual tension**, these conditions may lead to **social and marriage problems**.

- An increased rate of **marital disruption, family quarrels and divorce**, especially among the low socio-economic group of couples investigated was documented recently.

- **Performance anxiety** was reported among circumcised females who were afraid of being unfit and handicapped sexually to cope with their husband's male sexual demands.

- The presents and money given to the young girls by their parents or relatives during the celebrations and festivities performed on the occasion cannot and would not erase the horrors of being overpowered and the agony of having to watch the cutting knives, the blood and the feelings of severe pain and sometimes the unavoidable complications of the circumcision.

- The effects of the psychological trauma due to this operation may last for life among many women who **lose for good the faith and trust** they have given to their beloved when they were young, **associating hatred and painful memories with their parents**.

- **Submission to male domination** during the girl's childhood when circumcision is enforced upon them, is another drawback of the operation, since it may lead to **non harmony in the marriage relations** of a husband and wife (male and female gender struggle !).

- The syndrome of "**non-resolved sexual tension**" with its morbid psychological and physical complications is often met with among circumcised females during gynaecological medical practice.

#### **IV. Long range sexual complications**

- Many coital or sexual dysfunctions are reported, especially when drastic circumcision operations are practiced, for example when infibulation and Sudanese operations are done. Often the **bride must be cut open** before penile penetration can take place, which causes **further injury** and more **added infections**. It is reported that the bride-groom performs such cutting with the tip of his sharp dagger on the wedding night! And then indulges in forcible repeated coitus to keep the scar wide open... the least effect of this **miserable coitus** on the bride is devastating sexually and **psychologically harmful**...

- Severe excision forms of circumcision can also result in an almost **complete closure of the vaginal opening** by the adherence of the excision wound, this is reported in West Africa and elsewhere in countries where infibulation is not performed with resultant **apareunia** rarely and oftenly **dyspareunia**.



- **Anorgasmia** amounts to nearly **51%** of the women investigated; as a matter of fact in some female societies, it was shocking to discover that they are not aware that sexual intercourse can be pleasurable for them... It is important to record here that anorgasmia in non-circumcised females is only 9%.

- **Anal intercourse** was reported among some couples, knowingly or accidentally, because the usual normal vaginal intercourse was not feasible due to a tight vaginal opening, **painful vulval scarring**, and labial adhesions.

- **Vaginismus** was encountered among women who had suffered a past painful trauma due to a complicated operation.

- Circumcised women were found to indulge in **coitus less frequently** as compared with non-circumcised women and **only to please the husband**, submitting to his sexual advances in order to **get pregnant fast** (population explosion among low socioeconomic group of women) or giving **false excuses to avoid the sexual act** altogether leading to frank **sexual aversion** sometimes.

- **Males are encouraged to addiction of drugs** such as Hashish and alcohol, etc. on the assumption that it would prolong the coital act and delay orgasmic ejaculation in order to please their **frigid wives**.

- **Adultery** is reported by some authors as another sequelae of female circumcision, especially among the low socio-economic group of married couples.

### **Recent research in sexology**

The vital role of the clitoris to produce the female orgasm in the sexually stimulated female was established through the live laboratory experiments in female sexological behavior which was recently documented. The final conclusion is that the clitoris is the "**Conductor and transmitter**" of erotic sensations; while the orgasmic platform comes next in culminating the orgasmic release of neuromuscular tension. This orgasm is triggered mainly by clitoral stimulation either by direct stimulation of the clitoris or by indirect stimulation of this organ via the clitoral hood tension mechanism exerted during coitus. Masters research confirmed that 60-70% of women investigated sexually require manual clitoral stimulation during coitus in order to reach orgasm. While Prof. Hunt statistics estimated that the female astride position i.e. face to face woman above position is preferred now by nearly 75% of females investigated. Because in this position, maximum pressure is exerted by the pubic bone directly on the clitoris. At the same time, clitoral hood traction occurs with each thrust of the erect phallus exerting tension on the labia minora which is transmitted to the fold of skin (hood) that cradles the clitoris providing as such tactile stimulation to the shaft and glans clitoris (Kaplan, Sherfy and Johnson). Incidentally, (Miller & Leif) research about female masturbation techniques reported that orgasm is triggered in most females by stroking the clitoral shaft laterally or by simply



rubbing the whole vulval area with one hand. Some females apply the vibrator (sexual aid) superficially on their vulva to achieve sex stimulation maximally and ultimately to get orgasmic release.

## Medical conclusion

Certainly, the medical profession bears responsibility to accept female circumcision as a "national cultural trait", as much as do lay people. With ample medical evidence at hand to disprove any prophylactic benefits, on the contrary, it is proved that there are many dangers and unfortunate complications of this surgery. The medical profession and other interested parties have responsibility to stop and abolish this practice. The pretense of neutrality is a negative stance because it is a real hazard to the health and well-being of millions of young girls, no wonder, the World Health Organization in 1979, recognized female circumcision as a health issue impinging upon the lives of many millions of women and truly described it later as Female Genital Mutilation (FGM).

It is worth mentioning here the starking recent evidence which was proved beyond doubt of how valuable and important the role played by the external genitalia, namely, the clitoris and labia minora during coitus in order to achieve a successful orgasm; with a resultant pleasurable satisfying sexual and emotional encounter between a husband and wife; to convince forever the public in Egypt to stop and abolish their awful practice of female circumcision better named female genital mutilation (FGM). The minister of Health and Population issued a decree in 1996 prohibiting any form of female circumcision by medical or non-medical personnel. It is a step on the road; but my strongest belief is that sex education to the public is the answer for this very old harmful problem because I was campaigning against its dangers since nearly 30 years.

## Comment

In the final analysis, scientifically and medically, I confront those people (medical and non-medical) who are in favor of female circumcision on the assumption that the operation is done to reduce and lessen the sexual urge in girls and in our future wives. I present therefore the **embryology of the genital organs** in the following diagram (well established since many years), to show them once and for all that to perform excision on females is equal to the excision of the penis and scrotum in males !... Since the external sex organs in both sexes develop **embryologically** from one and the same organ namely; the **genital tubercle** at around the sixth week of gestation, differentiating later in utero into male and female external sex organs according to the chromosomal pattern of the foetus. As such, I believe it is fair enough to do the same, i.e. excision of the penis and scrotum of our young males in order to lessen and reduce their sexual urge !... What a mockery..., truly those proponents of female genital mutilation are following the same ridiculous old sex taboo proclaiming: "Sex is for the man's pleasure and not for the woman !..." dating 300 years ago. Evidently, such an old taboo is an insult to both genders in our eternal human sexuality.

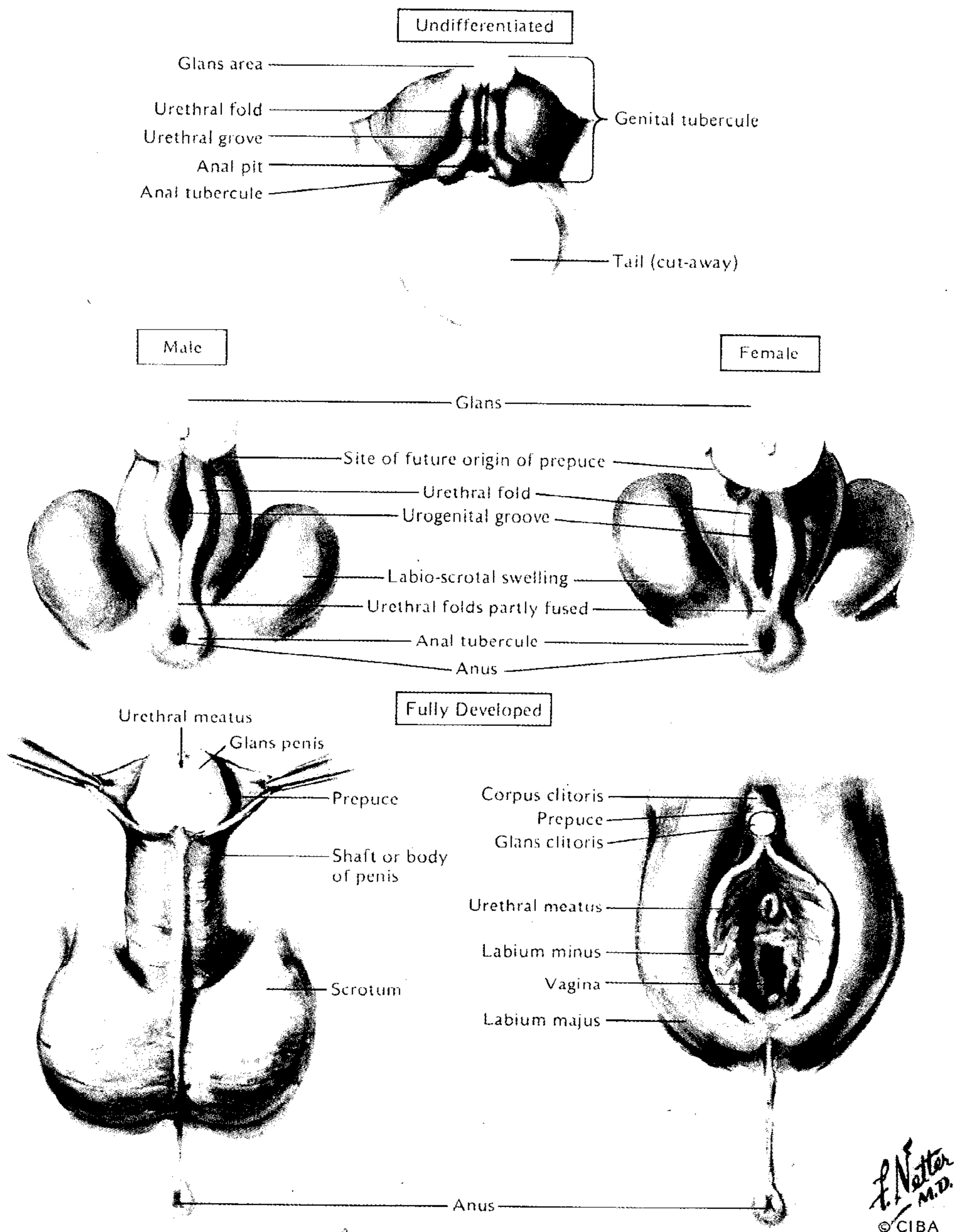


Figure 37. Development of male and female sex organs



## **Anatomical And Physiological Sexual Dysfunctions Among Female Genital Mutilation**

Unless we repeat the physiological responses of the sexually stimulated female reported earlier in chapter (4); the reader will not be able to grasp the full medical and sexological facts afflicting our circumcised females. Since the publication of Masters brilliant sexual research (1979), among non circumcised females, which was confirmed later by Johnson and Kaplan, it was revealed that the organic and physical etiology of female anorgasmia is among the following causes:

1. Any condition that affects the nerve supply to the female genitalia.
  2. Any condition that endangers the vascular blood supply and integrity of the female genital organs.
  3. Extensive surgical operations traumatizing the external female sexual organs.
- Circumcised females are subjected to many varieties of the following surgical procedures: 1) Clitoridotomy which is partial excision of the clitoris. 2) Clitoridectomy entails complete excision of the clitoris. 3) Amputation of both the clitoris and labia minora is termed partial vulvectomy. These three different operations destroy for ever the nerve supply to the external genitals as well as their blood supply; with an expected result of a high percentage of coital anorgasmia as compared with the normal non circumcised females.
  - Again the human female has been endowed with three primary erogenous zones before exposing her to the operation of sex mutilation; compared with the male one primary erogenous zone only, namely the penis. Through FGM procedures she loses the clitoris and / or the labia minora as well; that is to say two thirds of her primary erogenous zones, while she is left only with the vaginal orgasmic platform (the third primary erogenous zone). This orgasmic platform develops **only** after successful sexual stimulation during the plateau phase of the sexually stimulated female.
  - As such these handicapped females have missed the first two most important primary erogenous zones, and if they achieve the vaginal orgasmic platform and I repeat **if**, they may not have a successful orgasmic coital release.

One of the most established principles in the entire field of human sexuality is the fact that pre-coital petting, (efficient and not clumsy), is a must to achieve natural vaginal lubrication (through a process of transudation), for the possible pleasurable penile penetration by the husband. Sexologists know for sure that sexual foreplay as well as "sensate focus" reported in 1966 by Masters and Johnson, entails manual (tactile) clitoral stimulation (light or deep), so much so, that 60-70% of American females could only reach orgasm during coitus unless manual clitoral stimulation is performed.



- Now, we can realise how defective and unfortunate are circumcised females because they have lost forever these vital external sex organs which were created for this one and single vital goal, namely (sexual foreplay). Incidentally, one of the most common causes of dyspareunia (painful intercourse) is a relatively dry vagina (deficient lubrication) and inefficient clumsy precoital petting.
- The actual fact that circumcised females are slow to respond to sex stimulation, advanced by their hasty husbands, is another proof of the damage they received physically at circumcision, as well as the immense multiple everlasting psychological traumas they may have had when operated upon at such an early young age. Masters reported the fact that non circumcised females respond to sex stimulation as quick as males and that there is no such fallacy that females are slow in their sexual response. As a matter of fact, there were documented cases of many females who became orgasmic during their experiments after only 20-30 seconds from coital penetration !... Kinzey et al. reported as early as 1952: "That there is a critical problem for human males since some women require 10-15 minutes or **longer** of intense sexual stimulation in order to reach orgasm ... "Pomeroy and Martin reported later, confirming Kinzy's statement that, "75% of the men they studied during coitus ejaculated within 3 minutes of vaginal containment after penetration". We must not forget that the above statements are related to non circumcised females; now we can see why many males use Marijuana in this part of the world on the assumption that it helps to delay ejaculation in order to be able to satisfy their frigid wives.
- The signs and symptoms of the "Non resolved sexual tension syndrome", reported by Masters in 1979, were among non circumcised females who practice: coitus interruptus, teasers love, long exhaustive coitus and among prostitutes. The severity of this syndrome may be mild or severe according to its chronicity. These same signs and symptoms of non orgasmic release complained of are: 1) Bilateral adnexal pain. 2) Low backache. 3) Low abdominal uterine pain. These complaints were long neglected and undiagnosed by gynaecologists and they are nearly identical among our circumcised females due to the physically defective physiological and sexual response of chronic non resolved sexual tension, namely, coital anorgasmia.

The normal healthy coital orgasm denotes the sudden release of great neuromuscular tension, as well as the powerful involuntary rhythmic contractions of the fundus of the uterus, the orgasmic platform and the anus as well; simultaneously at the speed of 0.8 of a second. These orgasmic powerful contractions, amounting from three to fifteen contractions, pump the vasocongested accumulated blood from the genital organs back to the state of normality during the resolution phase, followed by relaxation and immense satisfaction. Chronic anorgasmia which means, repeated non orgasmic, (no muscular contractions), with subsequent residual neuromuscular tension as well as chronic vasocongestion may lead to varicosity and even a frank varicocele.

- Manifestations of chronic anorgasmia, whether mild or severe are reported by the medical profession as the following complaints: palpitations, insomnia, dyspepsia, early fatigue, anxiety attacks, depression, excessive worrying, emotional tantrums; last but not least, the famous spastic colon. Sexologically these females may present with: vaginismus (unconsummated marriage), dyspareunia, protective frigidity, lacking orgasmic capacity, sexual aversion and may be refusing coitus altogether (apareunia).
- The most important discovery reported by Johnson related to our subject was the vital role played by the clitoral hood (prepuce) during the female sexual response cycle. For those people who advocate the performance of proper female circumcision equivalent to the male operation i.e partial removal of the prepuce to minimize FGM complications, I present the following facts proved by Johnson. During the excitement phase the clitoris gets erect and emerges from under the prepuce, while later in the plateau phase, this erect clitoris gets angulated and rotates 180° ventrally and retracts under its clitoral hood (prepuce) against the bony symphysis pubis. In such a safe position it is well protected and completely covered by its prepuce to avoid any **direct** touch, because all females reported that direct touch at this stage of sexual excitement causes pain and discomfort especially if the area is dry. The natural secretions of the Apocrine glands in the prepuce keeps this area well lubricated; now we can see for sure the values and the importance of the clitoral hood and its crucial role during this phase of the female sexual response cycle.

# 10

## **SEXUAL PERFORMANCE IN DIABETES**

- **Male sexual dysfunctions.**
- **Female sexual dysfunctions.**



# **SEXUAL PERFORMANCE IN DIABETES**

## **Male Sexual Dysfunctions**

### **I. IMPOTENCE**

For almost two hundred years, it has been recognized that diabetes mellitus is frequently associated with impotence. Estimates of the frequency of impotence among men with diabetes have usually ranged from 40 to 60 percent, approximately one out of every two men with clinically apparent diabetes is sexually dysfunctional. The significance of this fact is more apparent when it is realized that there are at least few million men with diabetes in the U.S.A.- thus, nearly 50% are impotent as a result of the complications of this metabolic disorder, now how many diabetic men are suffering in Egypt ?.. The minister of Health and Population announced recently that 5% of the Egyptians are diabetics ...

The impotence associated with diabetes can occur at any age, but with a prevalence rate of impotence from 50 percent in men over the age of 50 years. This may be due in part to changes in circulation secondary to accelerated arteriosclerosis, which occurs more noticeably in the aging diabetic population. A lower prevalence of this problem is found in diabetics in their thirties or forties, (probably 25 to 30 percent in this age group are impotent).

#### **Natural History**

The most frequently observed and earliest manifestation is a mild to moderate decrease in firmness of the erection, although vaginal intromission is usually possible still. Attention to sporadic episodes of impotence or by diminished responses to erotic stimuli during sexual activity may be recorded. Gradual deterioration in the quality of the erection (i.e. decreased firmness), as well as in the durability of the erection occurs over a period of 6 to 18 months. The ability to ejaculate or to be aware of orgasmic sensations is not lost however, and libido is usually unimpaired.

A Less common pattern of impotence associated with diabetes may precede the actual diagnosis of this disorder. In such circumstances, the impotence is a manifestation of a general catabolic state and is typically accompanied by other highly noticeable symptoms, such as excessive hunger (polyphagia), excessive thirst (polydipsia), excessive urination (polyuria), pruritus and weight loss. This form of diabetic impotence is characterized by an abrupt onset, can occur at any age, and may be marked by loss of libido. When sufficient metabolic control is established to correct the catabolic state, the loss of potency (as well as the alteration in libido) quickly reverses.

## Pathogenesis

It is now reasonably certain that the impotence of diabetes mellitus is caused principally by diabetic **neuropathy**, a process of microscopic damage to nerve tissue that occurs throughout the body of the diabetic. Investigators have found that autonomic nerve fibres in the corpora cavernosa of the penis showed morphologic abnormalities of varying degrees due to the accumulation of "polyols". These chemical substances produce segmental demyelination and defective myelin synthesis, a process that results primarily from hyperglycemia. Clinical studies revealed a much higher rate of abnormal **cystometrograms**, indicating neurogenic bladder dysfunction in diabetics with impotence (37 of 45 men), than in nonimpotent subjects (3 of 30 men). In most reports, a higher percentage of impotent diabetic men have been found to have evidence of peripheral neuropathy on clinical examination than age matched diabetic men without impotence.

In some diabetic men, **macrovascular** or **microvascular** changes resulting from diabetes may be important causes of impotence. The small blood vessel disease that produces many of the complications of diabetes, (e.g. retinopathy and nephropathy) is known as diabetic **microangiopathy**. This abnormality is characterized by a thickening of the basement membranes of capillaries, a process that may be due to genetic factors as well as to increased carbohydrate content. Since the process of penile erection reflects a dynamic state of circulatory responses, it is possible that disease involving the network of small blood vessels in the body of the penis would result in impairment of erectile capacity. Obviously large vessel damage such as that produced by major **arteriosclerotic** lesions would also affect the process of erection severely.

## Evaluation

Most impotence associated with diabetes mellitus is not curable by known methods. Above all, one should remember that impotence occurring in a man with diabetes is not necessarily caused by the diabetes. Diabetic men who are experiencing potency problems must be evaluated thoroughly to determine whether or not distress is **primarily psychogenic** or whether it is caused by an **organic** process apart from the diabetes itself. Diabetics are just as susceptible as others to the psychic stresses of life, therefore causes of impotence such as depression and anxiety should be considered. Diabetic men with impotence that is psychogenic will respond just as well to competent psychotherapy as nondiabetic men. Another significant factor is that the **medications** being used by the man with diabetes may be the triggering mechanism for loss or impairment of erectile capacity. Since drug-induced impotence is usually reversible, when the offending pharmacologic agent is either discontinued or reduced in dosage, the prognosis in such instances is good.



Diabetics have an increased risk for many other diseases, including **infection**, various forms of **endocrine disease** (especially disorders of the thyroid and adrenal cortex) and **cardiovascular disease**. Since such associated pathology at times may be the major etiologic factor in sexual dysfunction, the presence or absence of these conditions must be assessed by a careful medical history, physical examination and laboratory evaluation.

## **Treatment**

When impotence is an early symptom of diabetes, it is usually a reflection of poor metabolic control. In these instances, careful attention to appropriate dietary management and the use of insulin or oral hypoglycemic agents will frequently produce relatively rapid amelioration of the disturbed potency. If impotence persists despite good metabolic control, consideration should be given to whether this problem is the result of anxieties, (fears of performance for example) that may remain even though the metabolic status of the individual has improved considerably. One should note that these anxieties may have come about only after the beginning of sexual dysfunction, in such cases, it is important to tell the patient that the impotence began as a manifestation of a specific health problem but is being perpetuated by the psychological reaction to that problem. Brief counselling to assist in anxiety reduction, coupled with a supportive approach to participation in sexual activity, will frequently be enough to overcome this pattern of impotence.

If impotence is present early in the course of diabetes even when control of the blood sugar appears good, the chances are that the prognosis for reversal of the sexual problem is much poorer. Nevertheless, either in this situation or in dealing with impotence that occurs years after the onset of diabetes, when underlying organic factors such as neuropathy, vascular disease, or hormonal disturbances can not be identified, diabetic men will often respond to sex therapy.

## **Management**

In deciding whether or not impotence in the diabetic may be amenable to psychotherapeutic reversal, the following points may apply:

1. Is the history suggestive of a primary organic etiology ? If a man can attain full erections with masturbation or in response to certain types of erotic stimuli, (e.g. reading erotic material), it is likely that the impotence is primarily psychogenic.
2. Are there indications of significant personality or interpersonal factors that may be contributing to the sexual dysfunction ? The presence of depressive symptoms- including decreased libido, may signal the existence of an intrapsychic process requiring prompt therapeutic intervention. Guilt, anxiety, poor self-esteem, phobias may also indicate a nonphysical cause for sexual disturbances. Likewise, marital conflict, financial problems and difficulties at work may point to important mechanisms underlying the occurrence of sexual problems.



3. Can evidence be found supporting the existence of neuropathy or vascular damage as a cause of impotence?. The most promising single test for such an assessment is the monitoring of nocturnal penile tumescence patterns (NPT). If normal patterns of erection occur during sleep, it can be assumed that there is no organic basis for the impotence. Further tests include, cystometrograms, selective arteriography, nerve conduction velocity measures or other electrophysiologic techniques. Color Doppler sonography is very valuable for diagnosis of vascular abnormalities; arterial or venous. At times, vascular obstruction causing impotence can be corrected by one of several surgical approaches. At present, there is no known medical cure for impotence due to diabetic neuropathy apart from the treatment mentioned before in the chapter of male sexual dysfunctions.

Whenever possible, counselling should include the wife of the diabetic man with impotence. Frequently impotence is mistakenly assumed to mean that a man finds his wife less attractive or less sexually stimulating. At another time, a wife may believe that impotence reflects a homosexual tendency on her husband's part or that it indicates that he is having an affair with another female!. Such assumptions are obviously detrimental to the trust and closeness of the relationship, both sexually and otherwise. Giving the wife an opportunity to learn about the disease and its complications is an important preparatory step in helping a couple seek sexual options that can be satisfying to them. When counselling is available for the couple, rather than for the diabetic patient alone, an important opportunity for ventilation, including the expression of guilt or anger, is provided. For many men, the ability to function sexually is an important source of ego strength and self-esteem, recognition of this fact by the physician is a necessary component of providing effective patient management.

It should be stressed by the physician, that impotence does not mean inability to be aroused or to obtain gratification from sexual activity, because more than 95 percent of impotent diabetic men are able to ejaculate normally, not forgetting the values of sexual intimacy which should be encouraged. Consideration must be given also to the personal, cultural and religious factors which are very important to the couple's sexual value system while counselling them.

### **Surgical approaches to treatment**

Recently, there has been increasing experience with the surgical implantation of penile prosthetic devices to provide a more satisfactory solution in the sexual problems facing men with organic impotence that is irreversible by other treatment methods. For selected diabetic men, this approach may be extremely beneficial. It is likely to be of most usefulness in the following cases:

1. The man has invested a major portion of his self-esteem in his ability to function sexually.
2. Significant depression occurs as a consequence of diabetic impotence.
3. Sexual dysfunction is materially affecting the quality or stability of marriage or long-term relationship.

4. There is no major loss of libido or impairment in the ability to ejaculate.
5. There are no medical contraindications to surgery.

It is necessary to realize whichever prosthetic device is utilized, a totally physiologic sexual response pattern will not occur, so that some men may be disappointed by the postsurgical results. Furthermore, because of the difficulties of wound-healing and great susceptibility to infection that accompany diabetes mellitus, there may be a higher rate of operative and postoperative risk associated with this surgery than in nondiabetic patients. Nevertheless, this approach may be warranted in carefully selected cases as a last resort.

## II. RETROGRADE EJACULATION

### Etiology

Retrograde ejaculation is a condition in which seminal fluid flows backwards into the urinary bladder at the time of orgasm rather than being propelled in a forward fashion through the distal urethra. This disorder is found in 1 to 2 percent of diabetic men. The cause of the problem in these men is an autonomic neuropathy that has progressed to the involvement of the neck of the urinary bladder. Normally the neck of the bladder closes tightly during orgasm and seminal ejaculation, with the result that pressure posterior to the prostatic urethra is so high that the seminal fluid moves anteriorly in the direction of least resistance. In affected diabetic men, because the internal sphincter of the bladder does not close effectively, then there is more resistance in the forward direction (resistance created normally by the walls of the urethra) and less resistance backwards into the bladder, since the distance is considerably shorter. Seminal fluid therefore mixes freely with the urine in the bladder and is expelled from the body with urination. The diagnosis is established by finding numerous sperm cells in a postcoital urine specimen after having demonstrated the absence of an ejaculate or spermatozoa in a condom used during intercourse.

### Prognosis

Diabetic men with this condition may or may not be impotent. If they are not impotent, there is a high probability that erectile dysfunction will occur in the future, since the underlying neuropathy is likely to worsen. However, diabetics with retrograde ejaculation still experience orgasm, although the sensations associated with the passage of seminal fluid through the distal urethra are absent, so that a man with this condition may describe an altered set of orgasmic sensations. Rhythmic contractions of the prostate and seminal vesicles occur in a normal fashion. For obvious reasons, retrograde ejaculation may be a cause of infertility. One potential solution to this problem is to perform artificial insemination, using an aliquot of seminal fluid and sperm cells obtained by centrifugation of the first postcoital urine specimen. If such an approach is taken, it is advisable to alkalinize the urine prior to ejaculation, (the usual acidity of urine is spermicidal) by having the man ingest sodium bicarbonate.



# Female Sexual Dysfunction in Diabetes

## ANORGASMIA

It is surprising to note that, inspite of the detailed research information concerning impotence in diabetic men, nothing appeared in the literature concerning females until 1971. A recent survey, comparing 125 sexually active diabetic women with a group of 100 sexually active non-diabetic women, all subjects were between the ages of 18 and 42 years. There was a marked similarity between the two groups in terms of: age, religion, education, marital status, age at menarche, incidence of dysmenorrhea, parity, frequency of coital activity, self-estimation of sexual interest and any history of psychiatric care. It was noted that **35.2 percent** of the diabetic women reported being completely **non-orgasmic** in the preceding year, whereas only **6 percent** of the nondiabetic women reported complete absence of orgasmic response during the same time period.

### Natural history

The onset of orgasmic difficulties is gradual and progressive, usually developing over a period of six months to one year. Most typically the time of onset is four to eight years after the diagnosis of diabetes is made. A gradual decrease in the frequency of orgasmic response, sometimes accompanied by a noticeable lessening of the intensity of orgasm. Sexual interest usually is not diminished but a minority of women complain that it seems to require longer periods of direct sexual stimulation for them to reach high levels of arousal, whether engaged in masturbatory or coital activity. Vaginal lubrication is not significantly altered in most diabetic women.

### Pathogenesis

Either **neuropathic** or **microvascular** changes or both may be responsible since both of these complications occur at greater rates with disease of longer chronicity. Evidence of other autonomic nervous system impairment can be found by careful examination, it is possible that most diabetic women do not "lose" the capacity to be orgasmic but simply require higher levels of stimulation to set off the orgasmic reflex. Studies with a small number of diabetic women who have experienced orgasmic difficulty that was overcome by the use of a vibrator have indicated that this may be the case. An element of possible etiologic importance is the greater susceptibility to **infection** in the **vaginal area** and **urinary tract**. Although acute vaginitis can be extremely uncomfortable, psychologically as well as physically, **chronic infection** remains a greater cause of sexual problems. **Moniliasis** seems most troublesome because it produces tissue tenderness, malodorous discharge, pruritus, and decreased vaginal lubrication. **Psychogenic dysfunction** might be expected when accompanied by diminished libido and a higher occurrence of dyspareunia and it might also be noted by a pattern of more abrupt onset, particularly in association with pregnancy.



## Management

A detailed medical and psychosocial history supplemented by information from the physical examination and the laboratory will provide the predominance of **psychosocial factors** in the etiology compared to primary **organic components**. Information related to drug use, medical problems, contraceptive and reproductive history, marital conflicts, other interpersonal difficulties, self esteem and attitudes toward sexuality will be of assistance to formulate an accurate diagnosis and plan of management.

Vaginal cultures must be applied to exclude vaginal infection since visual inspection or microscopic examination are not sufficient. When infection is diagnosed, follow-up cultures at the conclusion of a treatment regimen are mandatory, since many infections in diabetics are resistant to treatment. Particular care should be exercised in looking for **monilial infections** which are frequently present in diabetics especially if the woman continues to complain of **dyspareunia, urethritis, cystitis, or vaginal abscesses**.

The most common causes of "dyspareunia" associated with diabetes are **poor vaginal lubrication** (after infection), **atrophic vaginitis** (estrogen-deficient), infrequently **diabetic neuritis**. Poor vaginal lubrication may result from impaired microcirculation in the vagina or chronic infection and estrogen deficiency as well; but it should be kept in mind that this condition may also be a side effect of the use of antihistamines.

Addison's disease, Cushing's syndrome, hypothyroidism, hypopituitarism, and multiple endocrine adenomatosis occur more frequently in diabetics than in non diabetics and since these disorders produce sexual dysfunctions, it is important to consider them in the process of differential diagnosis. These diseases generally produce decreased libido and difficulty associated with sexual arousal in contrast to the situation in which sexual dysfunction is caused by diabetes.

## Treatment

Counselling the sexually dysfunctional woman is best approached by working with her together with her husband. Careful metabolic control of hyperglycemia and glycosuria will protect her against the development of complications. Whether or not the development of neuropathy can be prevented or at least delayed, it is clear that controlling blood sugar levels and urinary glucose concentrations will be important in diminishing the frequency and severity of infections that a diabetic woman will experience. The physician should attempt to eliminate possible correctable conditions causing or sharing in the causation of the sexual dysfunction, such as drug effects, infection or other physical disease. Personality patterns or psychoneuroses recognized by the counselor should be referred to psychotherapy.

The following points may be useful in the management of diabetic women:

1. Inability to be orgasmic does not alter a woman's reproductive capacity.
2. Inability to be orgasmic does not mean inability to enjoy sex.
3. Limitations to orgasmic responsiveness are not necessarily due to emotional problems; physical factors can be the primary or sole source of this limitation.
4. Intimacy, sharing and gratification-sexually and non-sexually-within a relationship e.g. marriage, do not depend on being orgasmic.
5. One's femininity or attractiveness is not reduced by not being orgasmic.
6. The husband of the diabetic woman who is sexually dysfunctional may need reassurance in knowing that he is not the cause of the problem of his wife.

# 11

## **EFFECT OF DRUGS ON SEXUAL PERFORMANCE**

- **Anti-hypertensive drugs.**
- **Hormones.**
- **Psychiatric drugs.**
- **Tranquilizers, sedatives and hypnotics.**
- **Alcohol and cigarettes.**
- **Hashish, cocaine and heroin.**
- **Miscellaneous prescribed drugs and aphrodisiacs.**



# **EFFECT OF DRUGS ON SEXUAL PERFORMANCE**

A great mystique surrounds the topic of the sexual impact of pharmacologic substances. Historically, many have pursued the search for an aphrodisiac but have met only varying degrees of satisfaction. Although the twentieth century has been a time of tremendous expansion of our pharmacopoeia therapeutica, the elusive aphrodisiac has not been found. Instead, clinicians realize that many pharmacologic agents may be potent inhibitors of sexual function. The effects that any pharmacologic agent will have vary greatly from person to person. This variability is due to biologic factors, such as absorption rate, rate of metabolism, body weight, rate of excretion, dosage, duration of use, and interaction with other drugs; and to nonbiologic factors, such as compliance with a medication schedule and patient suggestibility.

In most instances, the research that has been conducted regarding drug effects on sexual response focuses on the male; clearly, this reflects the fact that it is easier to assess sexual functioning in the male because erection and ejaculation are more visible than lubrication and orgasm in the female.

## **Effect of Antihypertensive Drugs on Sexual Performance**

### **( A ) DIURETIC AGENTS**

#### **Thiazide diuretics**

Clinical observation indicates that 5 percent of men using thiazide diuretics on chronic basis experience disturbances of potency that are attributable to the drug. Ejaculation is not known to be affected by diuretics. The impotency may be due to the hyperglycemic effect of the thiazides, whereas in other cases it may be caused by the potassium depletion (hypokalemia).

#### **Ethacrynic acid and furosemide**

Two non-thiazide diuretics that are similar pharmacologically, have also been observed to be associated with impotence in about 5 percent of men using these drugs chronically. The role of hyperglycemia and hypokalemia may be applicable to these drugs as well; so when a patient develops sexual difficulties because of diuretic induced hypokalemia, a trial of potassium supplementation may produce rapid amelioration of the problem.

#### **Spironolactone**

It is a competitive antagonist of aldosterone that conserves potassium and exhibits an antihypertensive effect. This drug causes decreased libido, impotence, and gynecomastia in men and menstrual irregularity and breast tenderness in women. These effects appear to be somewhat dose-dependent and reverse promptly on cessation of drug use, except gynecomastia.

## **( B ) NON-DIURETIC BLOOD PRESSURE-LOWERING AGENTS**

### **Alpha-methyl dopa**

One of the most widely employed of drugs used to treat hypertension, but unfortunately it is also a common inhibitor of sexual function. At dosage levels below 1.0 gm per day, decreased libido and / or impotence in 10 to 15 percent of men, and depressed libido and / or impaired arousal occurs in a like proportion of women. At dosage levels of 2 gm per day or more, approximately 50 percent of persons using this drug experience significant disruptions in sexual function; some women report loss of orgasm as well as decreased arousability, and some men experience delayed ejaculation. The cause of these problems may relate to both catecholamine depletion in the central nervous system and the production of a "false" neurotransmitter, which may have a direct effect on the peripheral nerves that control the processes of erection and vaginal vasocongestion. It was proved that alpha-methyl dopa does not affect circulating testosterone levels in men.

### **Guanethidine**

Because of its antiadrenergic properties, its primary effect sexually is one of inhibition of ejaculation in the male, which is a dose-dependent phenomenon. At doses above 25 mg per day, approximately 50 to 60 percent of men have retarded ejaculation or inability to ejaculate, erectile difficulties do occur too but in a somewhat lower percentage of men.

### **Hydralazine**

At dosages above 200 mg per day, 5 to 10 percent of men report decreased libido and sometimes accompanied by impotence. This loss of libido may be the result of a syndrome resembling systemic lupus erythematosus that can develop at high doses with this drug or it may be due to a pyridoxine deficiency that has been described in association with the use of hydralazine.

### **Reserpine and other rauwolfia alkaloids**

These drugs deplete stores of catecholamines in many tissues, including the brain, and produce a marked sedative effect. This sedative effect can be strong enough to lower libido indirectly, or it may be complicated-even at very low dosages-by the occurrence of a clinically significant depression. When such a depression occurs, a high percentage of affected patients will have sexual dysfunction as well as depressed libido.

### **Propranolol**

It is a well known  $\alpha$  beta-adrenergic agent that is used primarily in the treatment of cardiac arrhythmias but has recently enjoyed a broader range of uses, including the treatment of hypertension. Although some authors have claimed that no sexual problems are attributable to the use of this drug, more recently several instances of propranolol-induced impotence have been reported.



### **Clonidine**

Current evidence indicates that 10 to 20 percent of men using this agent experience impotence or diminished libido.

### **Metoprolol**

Although sexual dysfunction is infrequent while using this drug, except in those cases of patients who become depressed and subsequently sexually affected.

### **Prazosin**

This drug lowers blood pressure by peripheral vasodilatation and causes impaired libido in approximately 15 percent of men and women, but impotence occurs infrequently with this drug and it may be a useful alternative therapeutic agent for patients experiencing sexual difficulties with other blood pressure-lowering drugs.

## **( C ) GANGLIONIC BLOCKING AGENTS**

### **Pentolinium and Mecamylamine**

These drugs cause sexual problems in a large number of the patients receiving them. Urinary retention from parasympathetic blockade may also be a side effect of such drugs.

## **General Sexual Considerations in The Management of Hypertension**

Treatment of hypertension is a major public health problem, with one of the biggest difficulties being poor patient compliance with medication programs. This problem occurs partly because hypertension is a "silent" disease- people with hypertension often do not feel ill, and frequently the annoying side effects of the drugs used may seem worse than the condition that requires treatment!... Knowledge by doctors of the possibilities of sexual impairment as a consequence of drug use may be one step toward better management. The following recommendations are pertinent:

1. Before starting any patient on a medication program to regulate his or her blood pressure, obtain a **baseline history of sexual functioning**. This history will be important in helping to decide if subsequent reports of sexual symptoms are drug related or not, and it will also give the patient an indication of the fact that it is permissible to talk about sexual function.
2. Attempt to **select your drug** on the basis of common sense as well as medical guidelines. For example, do not select reserpine for a patient with a past history of depression, and do not choose guanethidine for a man who is trying to impregnate his wife.



3. About the possible **drug-associated side effects**, the key for a successful prescription is having the patient realize that drug-related sexual problems, he or she may experience are reversible.

4. When sexual symptoms arise during a patient's use of antihypertensive drugs, do not assume automatically that they are a result of these drugs. Inquire about other medications or illicit drugs the patient may be using. Be sure the problem is not a reflection of marital difficulties, alcohol use, or an intercurrent illness. Be alert to the possibility that psychological factors underlie the sexual dysfunction.

5. **Reversal of sexual problems** associated with the use of an antihypertensive drug can be achieved by eliminating the offending drug entirely or by reducing the dosage of the drug in question.

6. Be certain to **inquire about sexual problems** at each follow-up visit. Such inquiry will aid in determining the dosages of particular drugs that can be well tolerated and will be helpful in detecting sexual difficulties before they discourage the patient from seeking or continuing treatment.

7. More careful attention to the sexual side effects of antihypertensive drugs will surely be of assistance in helping to improve patient compliance, and consequently to **lessen the morbidity and mortality rates** of hypertension.

## **Effect of Hormones on the Sexual Function**

### **Androgens**

These hormones do not ordinarily increase libido or potency in men with normal endogenous testosterone production, although in men with testosterone deficiencies, an androgen treatment can often restore libido and potency to baseline levels. The administration of exogenous androgens suppresses the hypothalamic-pituitary-gonadal axis in men, so that testicular atrophy accompanied by severe depression of spermatogenesis may result from the use of moderate or high androgen doses on a chronic basis. Since some of the androgens in the circulation of the male are metabolized to estrogens, gynecomastia may result from the use of exogenous androgens for a long period. Prostatic hypertrophy and possible exacerbation of prostatic cancer are also risks associated with androgen use.

In women, high doses of androgen increase libido, but this effect is limited by the side effects that accompany its use. Hirsutism, acne, clitoral hypertrophy, and sodium retention are particularly troublesome. If androgen is used by a woman while she is pregnant, there is a significant risk of virilization of a female fetus, depending on timing, duration, and dosage of androgen used.

## **Estrogens**

When used by men, (e.g. in the treatment of prostatic cancer), it produces a prompt reduction or obliteration of libido and almost invariably result in impotence. This effect is probably attributable to depression of testosterone production. Impairment of ejaculation is another common result of estrogen use, when ejaculation does occur, the volume of seminal fluid is significantly reduced. Spermatogenesis is disrupted, gynecomastia is common, especially at moderate or high doses, and fascial hair growth often decreases substantially. Estrogens used by women do not typically exert a direct effect on libido, although this is not always the case. When an estrogen deficiency exists, estrogen replacement therapy supports vaginal lubrication, the integrity of the vaginal mucosa, and maintenance of breast tissue mass.

## **Antiandrogens**

These drugs are substances that oppose the pharmacologic effects of androgens. The synthetic steroid compound, “**cypoterone acetate**” is the prototype of antiandrogens. This drug acts by competitive inhibition of androgens at all androgen target organs, including the brain, resulting in the “shutting down” of the hypothalamic-pituitary-testicular axis, because the cypoterone acetate molecule is recognized falsely as being equivalent to testosterone. Cypoterone acetate reduces libido, impairs erectile capacity, and decreases the ability to be orgasmic in men. These are not side effects but the therapeutic effects of the drug, which is used in Europe and U.S.A. as a treatment for deviant or abnormal sexuality committed by sex criminals. Sperm production is markedly lowered by administration of this drug, which will typically induce a temporary sterility within six to eight weeks after it is begun; in fact, research is currently being conducted attempting to isolate the sexual and reproductive consequences of the antiandrogens to provide a male contraceptive agent. Gynecomastia may occur in association with the use of cypoterone acetate. All these effects appear to be reversible upon cessation of drug use.

## **Medroxyprogesterone acetate (MPA)**

It is another type of antiandrogen that is currently used for treating male precocious puberty and sex-offending behavior. MPA lowers production of testosterone, and libido; the effects on pituitary function appear to be most specific for gonadotropin suppression, although the pituitary-adrenal axis is also affected. Long-acting (MPA) can cause a dramatic reduction in sexual fantasies in pathologic psychosexual states such as obsessive pedophilia.

## **Corticosteroids**

A chronic daily dose greater than the equivalent of 20 mg of cortisol is sufficient to suppress the hypothalamic-pituitary-adrenal axis, but a higher dose leads to more frequent occurrence of many of the side effects of corticosteroids. The complications most likely to have impact on sexual function include, hyperglycemia and the precipitation of previously latent diabetes mellitus, increased susceptibility to infections (including vaginitis), muscle weakness, and muscle atrophy, depression and other mental disturbances, and suppression of



pituitary gonadotropin secretion. ACTH or synthetic corticotropin analogues lower circulating testosterone levels in adult males.

## **Effect of Tranquilizers, Sedatives and Hypnotics on Sexual Function**

Drugs used to lower anxiety are difficult to assess in terms of their effects on sexual function, because reductions in anxiety typically enhance sexual performance, whereas sedation usually diminishes sexual responsiveness and libido.

### **Meproamate**

It has specific effects on the limbic system and therefore may directly alter libido and sexual functioning.

## **The Benzodiazepine compounds**

### **Chlordiazepoxide and Diazepam**

They share sedative, antianxiety and muscle-relaxing properties. Either drug may produce increases or decreases in libido, which may be attributable to reduced anxiety and sedation respectively, impotence may occur only at high dose levels and then infrequently.

### **Barbiturates**

They sometimes lower sexual inhibitions and in this sense may enhance sexual function, but more commonly barbiturate users describe depressed libido, impotence, or loss of orgasmic responsiveness associated with drug use.

### **Methaqualone**

It is a non-barbiturate hypnotic that recently has achieved a reputation as an enhancer of sexual experience among illicit users, although adverse sexual effects were reported as well.

## **Effect of Drugs Used In Psychiatry**

### **Phenothiazines**

These drugs produce a sedative effect on both emotions and motor activity and are active at all levels of the nervous system.

### **Chlorpromazine**

It can block ovulation, cause menstrual irregularities, induce galactorrhea or gynecomastia, and decrease testicular size. Despite these effects, sexual dysfunction is not a common complication to the use of phenothiazine medications; when impotence occurs, it is usually at doses equivalent to 400 mg per day or greater. Decreased libido is found more frequently, approximately, 10 to 20 percent of patients, while hypersexual behavior will often abate with phenothiazine therapy. Inhibition of ejaculation and a decrease in vaginal lubrication in response to sexual arousal has also been reported.



### **Haloperidol**

Interestingly enough this drug increases testosterone production in men when given in low doses, but suppresses testosterone when high doses are used. Impotence occurs in 10 to 20 percent of men using this drug and menstrual irregularities also occur.

### **Monoamine oxidase inhibitors (MAO Inhibitors)**

Autonomic side effects that are dose-related are common, with delayed ejaculation or loss of ability to ejaculate affecting 25 to 30 percent of men users, while impotence occur in approximately 10 to 15 percent. These effects typically are reversible within several weeks after discontinuance of the drug because there are indications that MAO inhibitors may decrease testosterone production in the male.

### **Tricyclic antidepressants (Imipramine and Amitriptyline)**

These drugs are highly effective in the treatment of depression. It should be remembered that depressed libido and impaired sexual functioning are frequent findings in depression. In most instances, successful treatment of the mood disorder will result in amelioration of the sexual difficulties; although in approximately 5 percent of cases inhibition of ejaculation may occur.

### **Lithium carbonate**

This new drug is used in the treatment of mania and hypomania and it can produce a wide spectrum of changes in sexuality, including both hypersexual and hyposexual behaviors. It is known to have a variety of endocrine effects, including suppression of serum testosterone levels in adult men with consequent impotence in some individuals.

## **Effect of Miscellaneous Prescribed Drugs**

### **Anticholinergic drugs**

These medicines are used primarily in the treatment of gastrointestinal disorders such as peptic ulcer disease and irritable colitis. The inhibition of acetylcholine that makes these drugs therapeutically useful in the gastrointestinal tract also results in inhibition of the parasympathetic nervous system, leading to impairment of reflex vasocongestion in the penis (which ordinarily produces and maintains erection). Because of this effect, impotence is a frequent side effect in men receiving this type of medication. Women may experience decreased vaginal lubrication and interference with sexual arousal as a result of the use of anticholinergics because these phenomena are partly dependent on vasocongestive changes occurring in vaginal tissues.

### **Cimetidine**

A powerful drug which causes impotence, gynecomastia, impairs sperm production and alters the hypothalamic-pituitary-gonadal axis.

### **Clofibrate**

It is often used to lower serum cholesterol or triglycerides. diminished libido and impairs potency in some patients by unknown mechanisms.

### **Disulfiram**

It has been reported as an occasional cause of impotence among the male patients.

### **Digitalis and other glycosides**

These well known medicines can cause impotence and gynecomastia, the mechanism of action may be related to the finding that digoxin lowers circulating levels of testosterone, although this effect may have more to do with chronic illness and altered circulatory dynamics than with drug use alone.

### **Antihistamines**

It was found that these drugs can produce depressed libido in either men or women as a result of their sedative action, and vaginal lubrication may be significantly decreased while antihistamines are being used.

### **L-Dopa**

While this medicine is extremely useful in the treatment of patients with Parkinsonism; initial reports pointed toward a possible aphrodisiac action, but later it was shown that it does not raise testosterone levels in man although it inhibits prolactin and raises circulating growth hormone levels. The probable explanation for the improved libido in patients receiving L-dopa is the alleviation of a frustrating and incapacitating chronic illness.

## **Alcohol and Sexual Performance**

Alcohol and its effects on sexuality have been the subject of considerable conjecture and research for centuries. In "Macbeth", Shakespeare reported that "it provokes the desire but it takes away the performance"... Since that time, research has primarily substantiated the poet's observation. Farkas and Rosen gave alcohol in three different doses to college-age men and measured the increased in penile tumescence that occurred in response to erotic films. They found that blood alcohol concentrations well below levels of intoxication produced marked suppression of erection. Similarly, Wilson and Lawson, administered varying doses of alcohol ranging from 0.3 to 4.3 ounces of 80-proof alcohol to university women and found a significant negative effect on vaginal pulse pressure in response to watching an erotic film. Other studies have obtained similar findings in both animals and humans. The probable basis for the suppressing effect of alcohol is that alcohol acts as a **depressant to the central nervous system**, thus interfering with pathways of reflex transmission of sexual arousal. In addition to these acute effects of alcohol use, which certainly occur in situations that correspond to social drinking patterns, alcohol has also recently been shown to **lower circulating testosterone and luteinizing hormone** levels in healthy young men.



The acute effects of alcohol on sexuality are more complex than the preceding facts imply, however. Some researchers have suggested that alcohol has a disinhibition effect that is to say, it lowers certain sexual inhibitions a person ordinarily have, so that in some people the feelings of relaxation and increased openness to sex may combine to facilitate sexual response. In one study, 68 percent of women and 45 percent of men queried reported that alcohol enhanced their sexual pleasure, which can be seen as substantiation of the "disinhibition" theory. More recently, data from a series of interviews conducted at the Masters & Johnson institute revealed that fewer than 35 percent of women claimed that alcohol had a positive effect on their sexual experience, whereas approximately 55 percent reported that alcohol detracted them from their sexual feelings. It is not surprising that widespread differences in individual responses were noted here, since only a portion of the attributed "drug effect" may actually come from the pharmacologic activity-including central nervous system depression- that alcohol is known to possess. The expectations of the user and the setting of alcohol use are both important ingredients in defining the perception of effects that an individual will note. In addition, if a person is able to use just enough alcohol to overcome anxieties or guilt associated with sex, but not enough to impede sexual performance, the net effect may be a beneficial one. If, however this balance is exceeded, the person involved may be too drunk to care very much!...

## **Cigarettes and Sex**

Although cigarette smoking is a common practice, widely acknowledged to be linked with a number of health problems, very little systematic study has been conducted concerning the impact of smoking on sexual function. There is recent evidence indicating an association between smoking and an early onset of menopause and cancer of the cervix. But a report suggesting that plasma testosterone may be suppressed by cigarette smoking has not been substantiated by another study that found that acute cigarette smoking correlated with increased plasma testosterone concentrations. Studies in both clinical and research populations failed to reveal a difference in circulating testosterone levels between smokers and nonsmokers; in addition, a low incidence of cigarette smoking was found in 246 men with impotence than in age-matched men with normal potency. The experimental animal literature regarding the effects of nicotine or smoking on sex and fertility is generally inconclusive and methodologically imprecise. Of signal importance, however, is the extensive set of data indicating that smoking during pregnancy is associated with decreased birth weight, an increased risk of spontaneous abortion, and elevated perinatal mortality.

## **Effects of Marijuana or Marihuana on Sexual Function**

Also known as "Hashish" and Indian Hemp or Pot, it is tetrahydrocannabinol (THC). Considerable controversy has surrounded the issue of the effect of marihuana on sex. There are numerous reasons why this is so. Although marihuana is an illegal drug, in many circles its use is the norm rather



than the exception, and nonusers may unfortunately be under pressure to experiment in order to be accepted socially. In this regard, one of the reasons frequently cited for initiating the use of marihuana is its reputation as an enhancer of sexual feelings and experiences, so that the user often has positive expectations of an enjoyable drug effect. It is difficult to separate the expectations from the actual drug effect except under rigorous research conditions, (e.g. a double-blind drug-placebo administration experiment), which have not been used to date. When such a project was proposed, in a format similar to the alcohol experiments mentioned previously that measured penile tumescence in response to visual erotic stimuli, it was stopped because of political pressures!! The research that has been done thus far, has been difficult to interpret because of many issues of methodology that are difficult to solve or to control, because of the fact that many people who use marihuana also use other drugs, such as alcohol and tobacco, as well as psychoactive substances. It may be helpful to look at the biologic and behavioral aspects of the effects of marihuana on sex separately in order to gain a clear understanding of the variables involved.

### **Animal studies**

It has been shown that marihuana or its active ingredients can decrease copulatory behavior in male rats, inhibit spermatogenesis and depress circulating levels of testosterone. Marihuana has also been reported to suppress LH and prolactin in female rodents and primates. The weight of such evidence, even after making appropriate allowances for methodologic differences in interspecies studies, leaves little doubt that **marihuana is endocrinologically active.**

### **Human studies**

1. **In studies in men** during both acute and chronic administration, frequent marihuana use has been shown to depress circulating levels of testosterone in healthy young men. Although one study did not find a suppression of morning testosterone levels during three weeks of daily marihuana use, a similar study design that extended over a longer period of drug use, showed significant decreases in testosterone beginning with the fifth week of daily marihuana use. The depression of testosterone is not, of course, always significant in terms of either biologic function or behavior. Nevertheless, some men who are chronic marihuana users have been found to be impotent, and to experience a return to potency within a few weeks after discontinuation use of the drug. Furthermore, inhibited spermatogenesis also, has been observed in association with chronic marihuana use.

2. **Studies of acute marihuana use by women** who were either post menopausal or who had previously removed their ovaries surgically demonstrated that marihuana lowers pituitary gonadotropin levels by approximately 35 percent, indicating that the effect of marihuana is centrally mediated. In studies of chronic marihuana use by healthy women aged 18 to 30, users were found to have somewhat shorter menstrual cycles than nonusers, although LH and FSH levels

were not significantly different between the two groups. Interestingly, testosterone levels were higher in the women who used marihuana chronically, (probably reflecting the adrenocortical contribution to testosterone synthesis) and prolactin levels were significantly lower.

3. **Five years of interviewing subjects at the Masters and Johnson Institute** has resulted in a data base of information about the effects of marihuana on sex in 800 men and 500 women between the ages of 18 and 30. Briefly summarized, the majority of both men (83 percent) and women (81 percent) indicated that marihuana enhanced the enjoyment of sex for them. However, the responses to specific questions regarding how this effect occurred were revealing. For example, most men denied that marihuana increased their sexual desire, increased the firmness of their erection, made it easier to get or maintain erections, gave them a greater degree of control over ejaculation, or increased the intensity of orgasm. Similarly, the majority of women stated that marihuana did not increase their interest in sex, increase their arousability, increase the amount of vaginal lubrication, increase the intensity of orgasm or allow them to be orgasmic more frequently. Instead, both men and women attributed the enhancing effect of marihuana on sex to factors such as an increased sense of touch, a greater degree of relaxation (both physically and mentally) and being more in tune with one's partner. Most people said that if their sexual partner was not "high" at the same time they were, the effect was unpleasant or dyssynchronizing rather than enhancing...

In this same series of interviews, it was found that while fewer than 10 percent of a control group of men who had never used marihuana and a group who used marihuana once or twice a week experienced potency disorders, **almost one-fifth of the men using marihuana on a daily basis were impotent...** No statistically significant relationship was found between sexual dysfunction and chronic intensive marihuana use by women.

What is very clear, out of all this, is that marihuana is a drug that **heightens suggestibility**. Alterations in time perception and in the perception of tactile sensations are frequently reported, but these changes may not correspond to actuality. Thus, the marihuana user may well be perceiving an enhancing effect of this drug on sex, but in reality, sexual performance may be unaltered or even impaired... In instances in which marihuana relaxes inhibitions and loosens ordinary restraints on sexual behavior, people who are normally very anxious or guilty regarding sex may benefit. In some people, of course the relaxation produced by this drug progresses rapidly to somnolence or sleep!, which is not an ideal state for sexual activity ?...

4. **Medical marijuana** is the name given recently to a research project carried out in the U.S.A for the medical application of cannabinoids-marijuana's active components as being effective to alleviate pain, nausea and loss of appetite in patients suffering from advanced cancer as well as AIDS. Smoking offers an immediate delivery while the patients themselves can "titrate" the dose as needed.



An inhaler will eliminate the toxicity of smoke while it maintains a quick entry into the blood stream. As pills, it will take an hour to be effective. "Marinol" is the only synthetic legal cannabinoid available on the American market.

## Effect of Heroin and Methadone on Sex Performance

Drug addicts have long been known to experience disruptions in sexual function, but the cause of such problems has been obscure. On the one hand, a wide variety of theoretical intrapsychic factors relating to the significance of mainlining as a substitute for sex have been discussed. Chessick has suggested that the intensely pleasurable sensation of intravenous injection of heroin constitutes a "**pharmacogenic orgasm**", which is related to a feeling of increased ego mastery and decreased libidinal needs. On the other hand, practical factors involved in addictive behavior, such as preoccupation with the use of the drug, decreased social interaction, and the exhausting daily search for drugs or money to buy the drugs, may be viewed as significant behavioral components of diminished sexual activity or interest in sexual activity. More recently however, a clearer understanding of some of the biologic factors involved in drug addiction has emerged to help explain the sexual difficulties of the person addicted to drugs.

Azizi and his colleagues demonstrated **lowered serum testosterone** in male (heroin and methadone addicts), this finding has since been substantiated by others. Heroin addiction also **lowers pituitary gonadotropin** levels in serum. Cushman found that out of 19 men addicted to heroin, 12 reported impaired libido, 10 were impotent, and 15 had delayed ejaculation time. Cicero and coworkers described **serum testosterone** levels in methadone users that were 43 percent lower than normal. They reported that libido was suppressed in 100 percent of heroin addicts and 96.5 percent of methadone users, they also noted a high frequency of potency problems and retarded ejaculation or failure to ejaculate in both drug using groups. It is clear now that heroin and methadone are capable of exerting an **active endocrine** effect that predisposes to the development of sexual inadequacy.

Although fewer studies have been done with **female addicts**, Bai and coworkers reported that **decreased libido** was seen in 60 percent of women in their series, along with the following findings: **amenorrhea** (45 percent), **infertility** (90 percent), **galactorrhea** (25 percent), and reduction in breast size (30 percent). Many addicted women resort to prostitution as a means of supporting their drug habit. They may subsequently have negative feelings toward sex that reflect guilt, loss of self-esteem, or hostility toward men. **Poor nutrition** is a common finding in addicts and may be contributing to sexual problems. One should remember that cessation of drug use will not restore sexual and reproductive function to normal immediately; endocrine or psychological problems may persist for months before improving.



## Cocaine and Sex

Cocaine is reputed to possess sexually stimulating properties, including those of increasing desire, improving firmness and durability of erection, and intensifying orgasm for both men and women. However, 14 of 39 men reported loss of erection associated with cocaine use. Priapism has also occurred as a result of cocaine use. Research involving the sexual effects of this drug is extremely scanty and it is not possible to draw any conclusions at this time except the dangers of priapism. "Crack" is another product of cocaine, produced recently by drug smugglers to be cheaper to sell and more effective but unfortunately it is more damaging as well!...

## Miscellaneous Drugs

### Amphetamines

These drugs were studied by Bell and Trethowan and they noted some degree of "sexual abnormality" among its users. These authors and others have generally concluded that amphetamines use leads to an increase of libido and they reported a higher rate of "promiscuity" among its users.

### Amyl nitrate

This substance is a rapid-acting vasodilator that achieved very recently notoriety as an aphrodisiac that would intensify the orgasmic experience for both men and women. The drug is inhaled and produces tachycardia and local vasodilation; headaches and hypotension are frequent side effects. Syncope, S-T segment depression of the electrocardiogram, and other cardiovascular effects may also occur. These effects are not necessarily innocuous, but the drug should not be used recreationally at all, especially by persons with cardiovascular, ocular or cerebrovascular disease.

### Lysergic acid diethylamide ( LSD )

Related psychedelic compounds as well as ( LSD ) have been purported to act as aphrodisiacs, but the scanty research literature fails to substantiate this view. Piemme points out that: "taking LSD to initiate sexual relations is useless because the user can't remain focused on what he started to do". In interviews at the Masters and Johnson Institute with 85 men and 55 women who had used LSD on three or more occasions, fewer than 15 percent of each group claimed that LSD enhanced sexual participation. It is one of the most famous group of hallucinogens.

### Spanish fly

It is a bright green insect, when dried it is used for raising blisters; its medical pharmacological equal name is **Cantharides**, in greek, Cantharis blister fly. As an aphrodisiac it is highly toxic and dangerous through irritation of the genito-urinary tract.

## **Yohimbine**

One of the few drugs that have been formally studied for the treatment of erectile dysfunction. It is an indole alkaloid which has  $\alpha_2$ -receptor blocking activity in vitro and is derived from the bark of the *Pausinystalia yohimbe* tree. In a prospective double blind study in patients with organic impotence, yohimbine was not very effective, but a similar study in patients with psychogenic erectile dysfunction it showed useful activity.

## **Conclusion**

Although drug use has been pursued for centuries as a means of increasing sexual interest and enjoyment, there is little objective data to support the existence of a true aphrodisiac. Drug effects are highly variable both from person to person and for the same person at different times, and it is certain that subjective sexual perceptions may be widely altered as a result of drug use. All doctors and health care professionals should be familiar with the possible deleterious effects that pharmacologic agents may have on sexual function, since these effects may influence both the patient's quality of life and his or her compliance with a treatment program.

# 12

## **HOMOSEXUALITY AND LESBIAN LOVE**

- **History and Definition.**
- **Theories of Etiology.**
- **The Homosexual Patient.**
- **The Law and Religious Views.**
- **AIDS: A Lethal Mystery Disease.**



# HOMOSEXUALITY AND LESBIAN LOVE

## Historical background

Few topics in human sexuality have received as much attention in the past fifteen years as has homosexuality, no wonder that dozens of books and hundreds of journal articles have dealt with the increasing degree of research and the clinical recognition of this sexual problem. Homosexual behavior is depicted in the art, literature and histories of the most ancient civilizations, for example in the Greek and Roman empires. The legal and social acceptability has varied with time, culture, and circumstances; for example, male homosexuals could be regarded as model citizens in Pagan Greece; but for the believers; in Islam and Christianity, they have always been the scum of earth and were described as sinners. The old Testament demanded the death penalty for sex performance between males, and so did the Christian Roman emperors, Spanish inquisitors, past English monarches and American colonists. Later, psychiatrists declared homosexuals to be sick and proceeded to treat them with shock or aversion therapy, psychosurgery and even castration. In the past time homosexual behavior was a felony in most states of the U.S.A. and homosexuals were either sent to prison or committed to mental hospitals as sexual psychopaths. Recently, cross-cultural aspects of homosexuality were discussed by Ford and Beach, who found that 49 out of 76 societies approved some form of homosexuality, the same results were recorded by Marshal and Suggs.

Some famous historical personalities who were known to have had strong homosexual leanings are: Socrates (the famous Greek philosopher), Gaius Julius Caesar, King Richard (the lion hearted), Leonardo da Vinci, Michelangelo, Tchaikovsky, Hans Christian Anderson and Somerset Maugham. In the present time, it is worth mentioning few homosexuals who are famous for such perversion; Rock Hudson (most famous American actor who died of AIDS); four ministers in the labour government in the U.K. and many others, to indicate that homosexuality and Lesbianism is spreading allover the West in an alarming fashion...

## Definition

There is considerable diversity in the way homosexuality is defined in the scientific literature. Some authors restrict the term to describing **sexual contact between persons of the same sex**, whereas others extend the definition to include, **sexual desire or fantasy as well as overt sexual behavior**. Marmor and Green state, **homosexuality is a preferential attraction to members of the same sex**.

In their pioneering study, "**Sexual Behavior in the Human Male**", 1948, which included the sexual histories of 12.000 males and is still the most comprehensive statistical documentation of the sexual behavior of American

men, Alfred C. Kinsey and co-workers offered the following definition, "**sexual relations either overt or psychic, between individuals of the same sex**". All over history, the term homosexual has had an endless list of synonyms: homogenic love, contrasexuality, homo-erotism, the third sex, gay, queer, faggot, sissie, pansy, sexual inverts, psychosexual hermaphrodites. Female homosexuals are better called Lesbians, especially in America. Lesbian love or Sapphism is meant to describe female homosexuality and to show that homosexual females do not necessarily identify with every concern of homosexual males and that in many respects, their situation is unique.

Kinsey, devised a numerical scale for describing a person's sexual orientation on the basis of both behavior and fantasy. This seven-point heterosexual-homosexual rating scale, (Fig. 38), emphasizes the continuity of the spectrum of sexual orientation, with some persons living their entire lives in a single category while others shift along the spectrum from time to time.

Kinsey and his associates gathered cumulative estimates of the incidence of homosexuality by recording interview data from 5,300 white males and 5,940 white females. According to these workers, **4 percent** of white males were exclusively homosexual from puberty onwards, **10 percent** were predominantly homosexual for at least three years between the ages of 16 and 55, and **37 percent** had at least one homosexual experience leading to orgasm after the time of puberty. Primarily or exclusively homosexual behavior in females was approximately half of that found in males according to the Kinsey data. More recently, Gebhard estimated that the cumulative incidence of overt homosexual experience for the adult female population as a whole is between **10 and 12 percent**.

When Kinsey's statistics were first published since fifty years ago, they caused a great deal of public rage, first of all many people simply refused to accept the great number of reported homosexual acts. Indeed, even now various experts continue to challenge these figures as inflated and unrepresentative but the recent work published by Gebhard did show an even greater incidence of homosexual behavior especially among American females. By far the greatest shock for the public however, was the conclusion which the statistics revealed that; homosexual acts were believed to be so rare as to represent nothing more than unnatural and freakish exceptions. Kinsey and his followers showed that this traditional view was quite mistaken. For example, his statistics revealed that by the time they reach middle age (**about 50% of all males**), and (**20% of all females**) have had some sort of overt erotic experience with members of their own sex... This accounts for every second man and every fifth woman in the U.S.A. Indeed, 37% of all males (and 13% of all females) have at least few homosexual experience to the point of orgasm between adolescence and old age. This applies to nearly two males out of every five and to more than one female out of every eight. Thus, concerning human sexual behavior, Kinsey spelled out his theory that a heterosexual or homosexual activity may better be used to describe the nature of the overt sexual relations or of the stimuli to which an individual erotically responds.



## The Kinsey Heterosexual-Homosexual Rating Scale

A seven point rating scale with categories ranging from 0 to 6 which measured the balance of heterosexual and homosexual behavior in the American population as a whole, was presented by Kinsey and his co-workers. At the one end of this scale (in category 0), they placed those whose experiences are exclusively heterosexual, and at the other end (in category 6), they placed those whose experiences are exclusively homosexual. Between those two extremes are those who have both heterosexual and homosexual experiences in various degrees (categories 1 - 5). Thus the exact breakdown is as follows:

0. Exclusively heterosexual.
1. Predominantly heterosexual, but only incidentally homosexual.
2. Predominantly heterosexual, but more than incidentally homosexual.
3. Equally heterosexual and homosexual behavior.
4. Predominantly homosexual, but more than incidentally heterosexual.
5. Predominantly homosexual, but only incidentally heterosexual.
6. Exclusively homosexual.

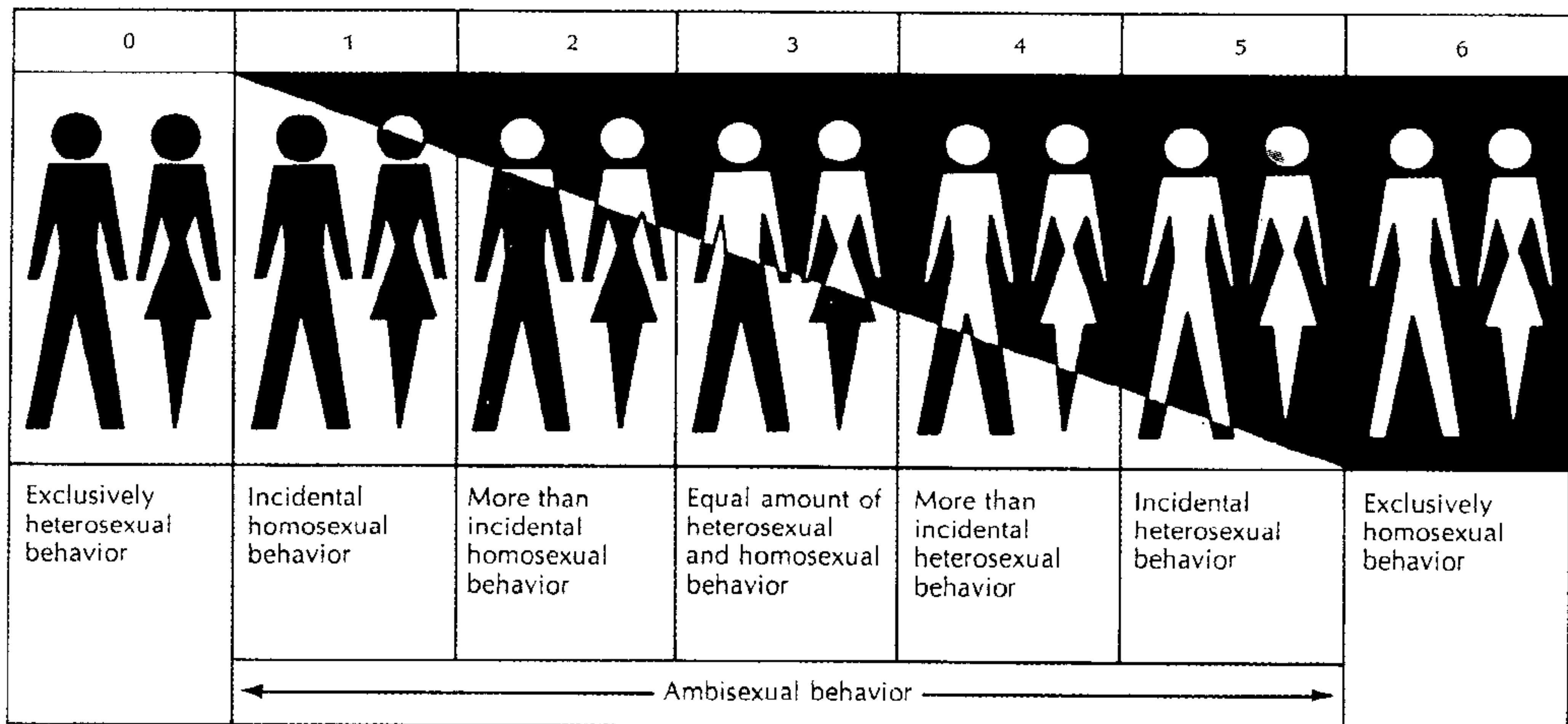


Fig. 38. The Heterosexual and Homosexual Behavior (Kinsey et al.)



## Theories of Etiology

Is homosexuality a single disease ?. Is it a symptom of neurosis ?. Is it an inevitable manifestation of a disturbed home or a disturbed society ?. Can it be a social ritual ?.

### BIOLOGIC CONSIDERATIONS

#### Genetic

There has been much historical conjecture concerning the origin of homosexuality but no current agreement that satisfactorily explains its etiology. Many homosexuals claim that their sexual orientation is the result of biologic factors over which they have no control or choice. Although a report by Kallman in 1952, postulated a **genetic origin** for homosexuality based on a study of concordance for sexual orientation among identical and nonidentical twins, subsequent studies have not supported this claim up till now.

#### Hormonal

More recently, interest has revived in the investigation of hormonal factors that may play a role in the development of human sexual behavior. Animal research has shown that hormonal manipulations can produce variations in adult sexual behavior that appear to be proportionate with homosexuality. Several studies in humans indicated that there were differences in the urinary excretion of sex hormone metabolites between heterosexual and homosexual men. Homosexual men excreted lower amounts of **urinary testosterone** than heterosexual men and their circulating testosterone levels were lower in young men who were exclusively or almost exclusively homosexual than in age-matched heterosexual men. Subsequent studies have produced conflicting results however. A number of reports have failed to demonstrate a difference between circulating testosterone concentrations in homosexual and heterosexual men, whereas a confirming report has also reappeared. Some investigators have found other endocrine differences between homosexual and heterosexual men, including higher levels of **estradiol** in male homosexuals, also higher levels of **luteinizing hormone** in male homosexuals, also differences in **serum lipid concentrations** and urinary hormone metabolite patterns. One report that found no difference in total plasma testosterone between homosexual and heterosexual men, found **significantly lower free plasma testosterone** in homosexual subjects, accompanied by **elevated circulating gonadotropins**.

A similar controversy exists in regard to the hormonal status of homosexual women. Although some reports describe **elevated levels of testosterone** in the urine and blood of homosexual women as compared to heterosexual controls, other reports have failed to find any differences.

The possibility of hormonal mechanisms influencing sexual behavior in humans is not simply a theoretical exercise. Information gained from instances of excesses or deficiencies of prenatal androgen; for example, the discussion into the adrenogenital syndrome and testicular feminization etiology. Also, research into the effects of prenatal exposure to female hormones indicate the probability that important aspects of sexual orientation and other components of behavior may be susceptible to early hormonal influence.

### **Psychosocial considerations**

Classic psychoanalytic theory views the determinants of adult homosexuality as disordered parent-child relationship or as disruption of the normal process of psychosexual development. Freud postulated an innate bisexuality in the human psyche, paralleling the early embryonic bisexuality of the human fetus. Freud believed that elements of this inborn bisexuality contributed to the universal presence of latent homosexual tendencies that might be activated under certain pathological conditions. These classic analytic concepts were derived from clinical impression rather than from research data. Later, analysts have moved away from the idea of inborn psychic bisexuality and have focused instead on ways in which childhood and adolescent experiences may lead to subsequent homosexuality.

A number of investigators have examined the family backgrounds of homosexuals in an attempt to elucidate theories of the cause of homosexuality. Bieber and co-workers examined questionnaire data provided by 77 psychoanalysts on 106 homosexual and 100 heterosexual male patients. A parental pattern consisting of a close-binding, seductive, overindulgent mother who was dominant over the detached, ambivalent or hostile father was found to characterize the histories of many of the homosexual subjects. Bene studied a group of 82 homosexual men and 81 married men who were presumed to be heterosexual; she found that the homosexual subjects more frequently had poor relationships with their fathers who tended to be ineffective and poor role-models. At the same time, there was no evidence that the homosexual men were more strongly attached to or overprotected by their mothers than heterosexual men. Other studies have also documented disturbed parental relationships in association with homosexuality. However, Greenblatt found that fathers of homosexual men were good, generous, dominant, and underprotective while mothers were free of excessive protectiveness or dominance. Siegelman reported that in groups of homosexuals and heterosexuals who were low in neuroticism, no differences in family relationships could be seen. Siegelman's findings are compatible with the view stated by Hooker: **"Disturbed parental relations are neither necessary nor sufficient conditions for homosexuality to emerge"**.

In recent years, investigators have increasingly come to accept the view stated by Marmor in 1965, that homosexuality is **"multiply determined by psychodynamic, sociocultural, biological and situational factors"**. Green theorizes that children who consistently show atypical sex-role behavior are more



likely than other children to develop a homosexual orientation as adults. In support of this concept, Whitam found that male homosexuals described childhood patterns showing interest in dolls, cross-dressing, preference for girls as play-mates, preference for being in the company of adult women rather than men. Usually regarded as "sissy" by other boys and childhood sexual interest in boys rather than girls significantly are more frequently noted than male heterosexuals.

The search for a Cause of homosexuality continues to be hindered both by methodological difficulties and by lack of homogeneity in the homosexual communities or "**gay populations**" as recently described.

### **Psychological adjustment of homosexuals**

Until very recently, homosexuality was viewed as an **emotional disorder**. This belief was partially a reflection of early research done on the subject that was conducted principally among populations of psychiatric patients and prisoners, hardly environments where one could expect to find psychologically healthy individuals. Nevertheless, the view that **homosexuality is a disease** is still held by some professionals.

Hooker provided one of the first balanced studies assessing the psychological concomitants of homosexuality in 1957. In this investigation, 30 homosexuals and 30 heterosexuals, (neither psychiatric patients or prisoners !) were matched by age, education and IQ. The subjects were given a variety of psychological tests, the results of which were shown to a panel of expert clinical psychologists who were asked to rate each subject's personality adjustment and to identify each subject's sexual orientation from their analysis of the test results. The personality ratings for homosexual and heterosexual subjects were not significantly different and the judges were unsuccessful in identifying subject's sexual orientation at better than a chance level.

Saghir and co-workers conducted an extensive set of investigations on male and female homosexuality. An important innovation of their research was in comparing homosexual subjects (male or female), with unmarried heterosexual controls, since the prevalence of certain psychiatric illnesses is higher in single persons. They reported that "there was little difference demonstrated in the prevalence of psychopathology between a group of 89 male homosexuals and a control group 35 unmarried men". In their sample of homosexual women, these workers found "slightly more clinically significant changes and disability" than among the heterosexual controls primarily reflected in an increased rate of alcoholism and attempted suicide. In both populations, however, the majority of homosexual subjects were well-adjusted and productive persons.

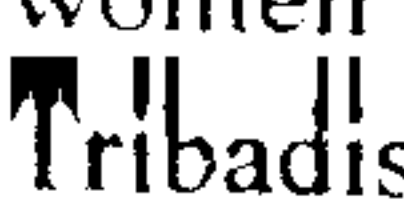


## The Homosexual Patient Diseases

If current estimates of the prevalence of homosexuality are accurate, most physicians deal with homosexual patients on a daily basis in the West. A relatively high rate of **venereal disease** in homosexual men has been documented by several screening programs. Judson and co-workers found that 48 of 419 men (11.5 percent) screened in Denver homosexual steam baths had asymptomatic gonorrhea and 6 men (1.4 percent) had early syphilis. Ritchey found 4 new cases of early **syphilis** and 13 cases of **gonorrhea** in an outreach program to control venereal disease among homosexuals. Because the primary lesion in syphilitic homosexual men may be oropharyngeal or rectal, it may go unnoticed by the patient and may only present as fulminant secondary syphilis. Similarly, homosexual men who engage in anal intercourse should have rectal cultures obtained to detect gonorrhea in addition to urethral and pharyngeal cultures.

Schmerin, Gelston and Jones reported on an increasing occurrence of **amebiasis** among male homosexuals who had not traveled outside the New York area. They pointed out that anal intercourse followed by oral-genital sex or oral-anal contact is the probable mechanism for the transmission of the infecting organism. Two cases of venereal transmission in homosexual men of multiple enteric pathogens resulting in amebiasis, **shigellosis**, and **giardiasis** have also been reported recently. The increased incidence of a variety of colonic and rectal disorders in homosexual men has been termed the "**Gay bowel syndrome**" ! by Sohn and Robilotti.

Other studies indicate that homosexuality may predispose to the development of **hepatitis B infection**. In a study of male homosexuals, 51.5 percent had serologic evidence of hepatitis B as contrasted with only 20.4 percent among male heterosexuals. A correlation was found between patterns of sexual behavior and the occurrence of serologic evidence of hepatitis B, with higher rates in those with involvement in anal intercourse primarily and those with large numbers of sexual partners. A similar survey conducted in England has confirmed these findings. However, it should be pointed out that sexual transmission of hepatitis B can also occur in heterosexuals.

Anal intercourse among homosexual or heterosexual couples can result in infections or **trauma** that may require medical or surgical intervention. **Condyloma acuminata** were noted in 51.5 percent of the patients seen by Sohn and Robilotti, who also found **non specific proctitis** in 12 percent, **anal fistula** in 11.5 percent and **perirectal abscesses** in 6.9 percent of 260 male homosexuals. **Chlamydia trachomatis** has been isolated from the throat and rectum of homosexual men. The use of a dildo or vibrators (i.e. sexual aids) by homosexual women may result in **laceration of the vagina** if applied unwisely,  **Tribadism**.

Again, **anal incontinence** has been recorded among those who had repeatedly traumatized the anal sphincter by the performance of sodomy or due to the introduction of sexual aids or solid objects repeatedly into the rectum. However, the sexual practices of homosexual men and lesbians do create few special health hazards that the attending physician should know of not forgetting AIDS patients of course...

### **Psychological and Sociological Aspects**

Homosexuals, male or female, may have problems related to the social, legal or economic pressures that they face in any part of the world. They experience emotional problems too, especially when pressured to change the direction of their sexual orientation. Unless the homosexual wishes seriously to change, such alteration is not undertaken. In fact, sex therapists are astonished realizing that some homosexuals seek treatment in order to enhance their homosexuality!- a realization at marked variance with the therapist's previous practice of attempting to eradicate homosexual behavior.

A recent report by Bell and Weinberg provides a large amount of knowledge concerning homosexuality, the behavior of homosexuals and their emotional stability. In this study, 686 homosexual men and 293 homosexual women were interviewed. The data led the authors to the delineation of five different homosexual typologies based on sexual experience: (1) **close-coupled** (living in a quasi-marriage), (2) **open-coupled** (living in a quasi-marriage but continuing to have a large number of other sexual partners), (3) **functional** (not coupled, having a large number of sexual partners with little regret over homosexuality and few sexual problems), (4) **dysfunctional** (not coupled, having a large number of sexual partners but with many sexual problems and significant regret about their homosexuality) and (5) **asexual** (not coupled, having low levels of sexual activity- with frequent sexual problems- and relatively low levels of sexual interest). The overall diversity of the group of study subjects was highly apparent, both from a socio-economic and from a psychological perspective. It is still widely accepted and generally believed that homosexual men are effeminate and homosexual women are masculine and that homosexuals make occupational choices on the basis of their sexual orientation.

### **The Law and Homosexuality**

In the past, "**Sodomy**" or sometimes termed "**crimes against nature**" were treated as serious offenses in the U.S.A., "oral" and "anal" intercourse as well as sexual contact with animals were grouped together under such category. In few countries penalties are extremely severe and depending on the country, it may range up to life imprisonment. In addition, offenders may be declared to be "**sexual psychopaths**" and may be imprisoned or sent to a mental hospital. Recently however, the law in the U.S.A. and Europe has become very soft indeed with homosexuals of both sexes while then the criminal code has changed to appear very mild unfortunately or no crime at all...



## History and Religion

A close look at ancient and medieval history reveals that the term "sodomy" is derived from the Old Testament. The early Christians believed that the biblical city of "Sodom" was destroyed by God because its male inhabitants has engaged in homosexual intercourse. We, as Muslims do believe the same since it is mentioned more than once in the Kôran our holy book.

قال الله تعالى في كتابه الكريم:

بسم الله الرحمن الرحيم

"ولوطا إذ قال لقومه إنكم لتأتون الفاحشة ما سبقكم بها من أحد من العالمين أعنكم لتأتون الرجال وتقطعون السبيل وتأتون في ناديكُم المنكر فما كان جواب قومه إلا أن قالوا انتنا بعذاب الله إن كنت من الصادقين".

(العنكبوت : ٢٨)

Christian Roman emperors enacted the first European laws against male homosexual behavior, offenders were burned at the stake. In medieval Europe "sodomites" were persecuted with equal zeal, they were publicly burned alive after the confiscation of their property. Modern viewers may be especially intrigued by a curious detail when shown the method of execution; the stake is equipped with a penis-shaped peg which is placed between the legs of the condemned holding up the body while it burns !.

In recent years, the society in some countries for example, in England, Europe and U.S.A. has become more lenient with homosexuals, allowing them the freedom to have their own bars, clubs and villages (**gay populations**). While a number of states in America and England have repealed their sodomy laws, the Supreme Court of the U.S.A. refused to change the existing laws against sodomy in the past. No wonder, a deeply distressed president of the American Psychiatric Association pointed out in a letter to the Chief Justice, that not only 20 million Americans are homosexuals but they are also branded as criminals !. Nowadays, in America and most European countries, homosexuals and Lesbians are accepted socially and that is a catastrophe while legally it is allowed and naturally it is disastrous...

## Treatment

Masters and Johnson described a research program focusing on homosexuality from the perspectives of both the physiology of the sexual response and the results of participation in **sex therapy**. In their physiologic studies, 94 homosexual men (age range 20 - 54) were investigated during sexual activity in the laboratory in a fashion analogous to the methods employed for heterosexual men and women in the "**Human Sexual Response**" experiments. When the observations of homosexual male and female subjects were compared



with data from a subset of subjects previously reported in their book *the Human Sexual Response*, there were only minor differences in the rates of functional efficiency of sexual response cycles.

Masters and Johnson described two different clinical situations in which homosexuals were treated. In one group, homosexual men and women who were sexually dysfunctional were treated in the dual-sex therapy team format for the specific dysfunctions of **impotence or anorgasmia**, respectively. In 57 impotent homosexual men, the overall failure rate after five years of follow up was 10.5 percent. Similarly, in 27 nonorgasmic female Lesbians, the overall treatment failure rate after five years of follow-up was 11.1 percent. There were relatively few differences in techniques of sex therapy for the reversal of sexual dysfunction in homosexual and heterosexual couples.

In a second clinical group, **homosexual men and women who wished to convert or revert to heterosexual functioning** were treated. In contrast to more traditional psychotherapeutic approaches to this situation, relatively good outcomes were found. These results must be interpreted cautiously, since the patients who were treated were a highly motivated group but it is clear that homosexuals who are dissatisfied with their sexual orientation may turn to their physicians with greater confidence about the prospects of obtaining effective treatment than they could have done in the past. A number of psychotherapeutic approaches have been employed with varying degrees of success. Some may argue that sexual orientation is essentially irreversible in adults, although behavior may still be changed. In any event, it is clear that physicians and sexologists must no longer stigmatize homosexuals or deprive them of needed treatment, and must not leave them to rot in prisons or mental institutes. As a matter of fact, many of the homosexuals males or females, are openly maltreated in some of these prisons since several cases of rape have been reported repeatedly.

### **Conclusion:**

It is very unfortunate that the Western civilization has accepted homosexuality and Lesbianism as a normal way of life. We must try to avoid such calamity by increasing our efforts to spread proper sex education within the frame of our religion.

## **AIDS: A Lethal Mystery Disease**

The deadly disease first broke out in the homosexual communities of New York, San Francisco and Los Angeles in 1981. Later, it cropped up among heroin addicts, Haitian refugees and victims of Hemophilia. Experts call the new disease, **acquired immune deficiency syndrome (AIDS)**, meaning a breakdown in the body's natural defenses that often leads to fatal forms of cancer and lethal bouts of infection. The cause of this illness was unknown but was thought to be caused by an infectious organism and the mortality rate is 50 percent!.

The disease begins with malaise, a low grade fever, night sweats, weight loss and swollen lymph glands. In about 40 percent of cases, it leads to a deadly form of **Kaposi's sarcoma**, previously unknown in the U.S.A.. AIDS victims also face the risk of lethal infections such as **pneumocystis carinii pneumonia (PCP)** and **mycobacterial infection**.

### **Etiology**

What makes the immune system go awry ? An early theory linked the problem to amyl nitrite, a substance widely used by homosexuals to enhance sexual pleasure. The pattern of AIDS closely resembles the occurrence of hepatitis B which commonly strikes homosexuals, drug addicts using contaminated needles and sometimes patients getting blood transfusion. All attempts to isolate an infectious agent failed until recently when the suspected agent a cytomegalovirus was discovered, it is an organism known to be found in Kaposi's sarcoma tissues. CMV can be transmitted by blood, it can be transmitted sexually and it is capable of causing immune suppression, scientists are already looking for CMV antibodies in the serum of AIDS patients.

Recent research suggests that AIDS may be transmitted in more ways than originally believed, i.e. through male homosexuals, drug abusers and those infected by contaminated blood or blood products. But, it is proved to be a sexually transmitted disease, the only one that is almost invariably fatal, that can be caught and passed on by persons of either sex. In the U.S.A., the National Cancer Institute stated that: "Given enough time and heterosexual contact, this virus will move gradually into all parts of the population !".

The number of cases of AIDS is doubling each year, which would mean about 35,000 cases by the end of next year in the U.S.A. only (1983). In Europe, the World Health Organization reported many new cases in 17 different countries. Because, it is now clear that chiefly in Africa, AIDS is a heterosexual disease, since about half the victims are women. Contact with prostitutes is a common factor in many of the African cases reported in Zaire, Rwanda, Uganda, Tanzania and Kenya. But those suffering from AIDS itself are only part of the picture. Because for every victim, there are five to ten more people who suffer from a less severe form of the disease that is not fatal, and more than 50 to 100 others who have been infected with the AIDS virus but show no symptoms -



600,000 to 1.2 million in the U.S.A. only. No one knows how far or fast the epidemic will spread.

French scientists at the Pasteur Institute in Paris, have isolated the virus as well as other researchers and it was named: HTLV-3 or LAV by the French researchers. It was described as the No. one U.S.A. public health problem and the most diabolical virus ever discovered in history because it knocks off the very cells that are supposed to protect the human body.

### **Mode of Infection**

Scientists up till now are unsure of the origin of the AIDS virus, how it works and why it targets the white blood cells known as T4 lymphocytes. Strange enough the virus was recently found in the brain cells, in the epithelial cells that line the eyes and eyelids, but it is certain now that the virus is also present in saliva, tears and urine in addition to blood and semen. However, anal intercourse is believed to be the most efficient mode of transmission. Intimate deep kissing, in which saliva is exchanged could well transmit the disease, if the uninfected person has any cuts, sores or bleeding gums. Homosexual men account for 73 percent of U.S. adult cases, intra-venous drug abusers account for 17 percent while blood transfusion recipients compose nearly 2 percent, hemophiliacs almost 1 percent. Heterosexual men and women about 1 percent, through sexual contact with infected bisexuals and heroin addicts. So far about 6 percent of adult cases and 10 percent of childhood cases are in people who fit none of the known risk groups ?.

### **Research**

Much of the current concern focuses on heterosexual transmission, but researchers caution that it may take several years for a clear discovery. A key link may be prostitutes, who are often drug abusers and therefore at risk for AIDS. Nearly one-third of a sample of about 80 male AIDS patients classified as being in the "no known risk" group admitted to prostitute contact !!. Studies at the Walter Reed Army Institute of Research of U.S. military personnel with AIDS also implicated prostitutes, as do studies of African and Haitian AIDS patients. Many experts say the risk to the heterosexual population will increase over the next five to ten years, with those who have many sexual partners in greatest danger.

The most popular hypothesis prevailing so far is that AIDS is indeed a fairly new disease, and that the AIDS virus originated during 1960 in central Africa as an evolutionary descendant of a monkey virus. The species known as the African green monkey carries a virus very similar to the AIDS virus. Tests of its molecular structure show that it differs only slightly from the AIDS virus. This monkey virus causes an AIDS-like disease among several species of monkeys, which is called SAIDS, for simian, or monkey AIDS.



## **Epidemiology**

Epidemiologists tracking AIDS found that while it spreads more slowly than the fearsome plagues of the past, still it is much more deadly. Bubonic plague and cholera killed about half their untreated victims, smallpox as many as 40 percent. The death rate for all the U.S. AIDS cases to date is 50 percent. Truly the disease takes years to kill its victims, but among those patients discovered during the early years of reporting, the death rate approached 100 percent!., no one has been cured. Once you get the disease it is essentially, uniformly fatal. Doctors at the various centers for disease control were alarmed at the rapid spread, but reassured at least at first, that the disease appeared to be transmitted only through sexual transfer of semen or blood, through sharing hypodermic needles, transfusion of blood products or to an unborn child during gestation or just after birth.

The slower pace of AIDS epidemic is offset by a potentially more frightening uncertainty about who is infected and what may happen to them. The U.S. government best estimates suggest that 5 to 10 percent of those infected will come down with AIDS in five years. About 25 percent will get a syndrome, also over a five-year period, now known as ARC or (AIDS related complex), which causes vague symptoms such as fatigue, low grade fever, swollen lymph nodes, diarrhea and weight loss. Any where from 5 to 20 percent of ARC cases may go on to get AIDS, but for the rest the symptoms of ARC persist.

## **Incubation Period**

Because AIDS is so new, its incubation period is vague, blood-transfusion cases now average about two and half years from the time of exposure to development of the disease, but some cases can take more than five years even lasting beyond 12 years. And because the virus may insert itself into the host's own genes, the effects of the dormant AIDS virus, may not show up for decades, perhaps not until old age when the immune system normally weakens. We have to assume that anybody, who is truly positive on the blood test is potentially infectious to others.

Most people in the hardest hit groups already have infections from other sexually transmitted viruses, such as hepatitis B virus and the Epstein-Barr virus that causes mononucleosis. These groups include not only homosexual men and heroin addicts who share needles but the African victims as well.

Experiments have shown that AIDS-infected T4 cells growing in a test tube can live indefinitely, dying only when exposed to some unrelated foreign protein that stimulates them into action. As such, it is possible that a human infected with the virus could at least postpone the onset of AIDS if he avoided ordinary infections ?.

## Treatment

Better understanding of the virus is helping scientists design drugs to interfere with its survival, and ultimately, a vaccine that would protect those not yet exposed. A prototype vaccine that has been given to rhesus monkeys produced antibodies in their bodies, now, scientists in U.S.A. Scotland and Sweden are waiting to see whether these antibodies would prevent the AIDS virus from invading the monkey cells.

Health officials urge the public to reduce the risk of spread of the disease by changing any abnormal sexual behavior and particularly by avoiding multiple sexual partners. Pentamidine has proved to be effective in the treatment of pneumocystitis pneumonia as well as Interferon, but treatment is still tricky and prevention is the most effective way of dealing with AIDS which has already struck terror throughout the homosexual populations all over the world.

The only real hope for AIDS patients lies in two categories of drugs: those that attack the AIDS virus directly, generally by interfering with its replication, and those that are aimed at rebuilding the immune system. The antiviral preparations under research now are: The Pasteur Institute HPA-23, but unfortunately it causes serious blood clotting problems, Suramin, Ribavirin and Foscarnet which are described truly as not being miracle drugs. To revitalize the weakened immune systems of AIDS patients, bone marrow transplants and infusion of interferons and interleukin-2, which is another substance produced naturally by white blood cells. But such efforts, like those aimed at arresting the virus, have failed so far to influence the course of this fatal disease.

## Religious view

Islam and Christianity prohibited anal intercourse strictly because of its dangers and serious complications.

قال الله تعالى في القرآن الكريم. سورة الشعراء آية: ١٦٥

بسم الله الرحمن الرحيم

"أَتَأْتُونَ الذَّكَرَانَ مِنَ الْعَالَمِينَ وَتَذَرُونَ مَا خَلَقَ لَكُمْ رَبُّكُمْ مِنْ أَزْوَاجِكُمْ بَلْ أَنْتُمْ قَوْمٌ عَادُونَ."

## Recent Research in AIDS / HIV

Considerable progress has recently been achieved in understanding the pathogenesis of (HIV-1) and in improving the efficacy of antiretroviral therapies for the treatment of patients with AIDS. The pharmacological properties of new drugs e.g. (AZT) are very effective in establishing a long-term suppression of (HIV-1) replication and have remarkably increased the survival period of patients with AIDS. However, current therapies are still far from eradicating (HIV-1) from patients and do not prevent the development of AIDS-related malignancies which affect 40% (HIV-1) individuals e.g. Kaposi's sarcoma, non-Hodgkin's



lymphoma, intraepithelial cervical carcinoma and anal neoplasia. The cost of therapy is very high and expecting the number of individuals affected by (HIV-1) by the year 2000 to be 40 million !... while some 90% of these individuals are in developing countries which can not afford the cost of antiretroviral therapies and not even sure to have a proper follow up of patients with AIDS.

Among youth, the association of alcohol and drugs to HIV/AIDS risk is significant and that prevention programs need to target alcohol and drug use as important influences on risky sexual behavior.

Treatment of (HIV-1) infection with (Zidovudine) does not exert uniform selective pressures in multiple organs with the likelihood of different resistance patterns being present in multiple sites within the same individual. The new drugs of the protease inhibitors e.g. (Saquinavir) raise the possibility of disarming the HIV critical enzymes.

The HIV/AIDS epidemic has put men's sexual behavior in the spotlight. Prevention is the only solution. Yet, too many men still engage in risky sexual practices, such as having multiple sex partners, including other men (homosexual behavior), and not using condom consistently. In some countries, such as Thailand many married men frequent sex workers and do not use condoms with prostitutes. In Asia and Africa, some older men seek out virgin girls, known as (cherry girls) ! whom they believe to be safe from HIV...

Condom use has to be increased among adolescents because of the widespread awareness of AIDS and sexually transmitted diseases (STDs). Information and sex education about safe sexual practices should continue to protect the high risk males and females.

The global AIDS epidemic provides the starkest contrast between the planets halves and have – not... In parts of Southern Africa, the infection rate is 25% and rising. In Uganda considered ground zero of the plague, life expectancy has fallen to 43 years !... The WHO report on the highest AIDS cases in 1997 are: Sub-Saharan Africa 71%, South and Southeast Asia 20%, Latin America 4%, North America 3%, West Europe 2%, East Asia & Pacific 1% and Caribbean 1%, India has got more than 4 millions infected with HIV.

Latest research by scientists at Alabama University U.S.A reported in the International Congress for the Prevention of AIDS that the (HIV) virus may have been transmitted to humans from the Chimpanzees in West Africa... The virus has been discovered in a dead chimpanzee while the speculated possible role of transmission is through eating the flesh of these chimpanzees. Thirty million humans are infected now with this virus (WHO report); 17 millions are men while 12 millions are women. Scientists hope to prepare a vaccine now that they know the HIV virus is present in these animals without causing them any harm or epidemic... With the help of genetic engineering applied on the HIV virus, their results to find this hopeful vaccine have failed so far; but another trial is being carried out in Uganda with a new vaccine given to a few human volunteers.



# 13

## **MASTURBATION OR THE SECRET SIN**

- **Terminology and Technique.**
- **Religion and History.**
- **Sexual Aids and Research.**
- **Medical Opinion and Conclusions.**

# MASTURBATION OR THE SECRET SIN

## Terminology

The word masturbation is derived from the Latin verb *masturbare*; which means to defile by hand or to disturb by hand. The term was introduced into the English language only about 200 years ago. Before that time, people used other descriptions, such as "**youthful passions**" or "**solitary pleasures**". It is also termed "**Onanism**" and the "**secret sin**". Still, it is important to realize that the term is actually quite imprecise and misleading, because both males and females can masturbate without using any hands. Therefore, when modern sex researchers speak of masturbation, we refer to: "**any deliberate bodily self-stimulation that produces a sexual response**".

## Technique

Such deliberate stimulation can take many different forms. In a great number of cases, of course, the hands are indeed used. Thus, males may fondle, rub, or stroke their erect penis with their hands until they reach orgasm. At the same time, they may also use one hand to manipulate other erogenous zones of the body. For instance, in order to increase their overall sexual arousal, they may touch and lift their scrotum. There are some rare cases in which men insert a solid thin object into their urethra or into their anus for further sexual stimulation. It goes without saying that this latter practice is potentially dangerous.

Females may also use one or both hands to masturbate. Most often they manipulate the entire vulva, or gently stroke the shaft of the clitoris and the labia minora. Some women simultaneously play with the nipples of their breasts, and in some females, this breast stimulation alone may lead to orgasmic release.

Instead of using their hands, both males and females may also simply rub their sex organs against some object, such as a pillow, a towel, the bed covers, or the mattress. Indeed, some females reach orgasm by riding a bicycle or a horse!. Many females can also masturbate by crossing their legs or pressing them together while moving rhythmically back and forth. In certain instances, rhythmic muscular tension alone is sufficient to produce an orgasm among some very excitable females.

Many men imagine that women always insert their fingers or some cylindrical object into the vagina when they do masturbate. However, only relatively few women do so, because there is almost no sensation in the inner two thirds of the vagina itself since its walls contain hardly any nerve endings. Instead, the most sensitive and excitable female organs are the clitoris and the minor lips. Thus, females may on occasions, insert a finger into the vaginal opening which is sensitive to touch and palpation in order to gain a firm hold for the rest of the hand, which then stimulates the external sex organs.

## Sexual Aids

Those females who insert various solid or semisolid objects deep into the vagina often do so to please themselves more, or to entertain and please their company. The objects used for this purpose are usually simple household items; such as candles, cucumbers, or bananas and hundred other variable objects that may suit and fulfill their personal requirements. However, today there are also special masturbation gadgets, termed sexual aids, the most popular of these is the artificial penis, also known as a "**dildo**", (probably from the Italian word *diletto*: delight). **Dildos** are made of wood, rubber, or plastic, and some of them can even be filled with warm liquid, which, when suddenly released, simulates an ejaculation of the male... Penis shaped, **electric** or **battery operated vibrators**, have appeared recently in many American and European drugstores and sex shops all over the world.

The Japanese have developed still another strange sexual device called "**benwa**" or "**rin-notama**", it consists of two hollow metal balls, one of which contains a smaller ball made of lead or mercury. The two balls are introduced into the vagina when needed and held in place by a tampon; the women's normal bodily movements then cause the balls to click together and to send then pleasant vibrations through her entire pelvic region. It is not certain, however, whether they can cause much sexual arousal or lead to orgasm, because they (the two balls), never touch the clitoris at all, and the vagina itself contains virtually no nerve endings. Only, the outer third (orgasmic platform) has nerve endings and narrows in response to sexual stimulation. Finally, there are invented recently some electric vibrators or battery operated massagers (penis-shaped or otherwise) under the pretext of body massage, which are meant to be used on the female external sex organs, where with different adjustable vibration speeds, it provides a much more effective sexual stimulation than could be achieved by vaginal insertions only.

## Age of masturbation

(Infant and childhood masturbation is mentioned in detail in the chapter of the development of sexual behavior).

While still in their infancy, both males and females may start to masturbate all by themselves, as they play with their sex organs, they may discover some pleasurable feeling and then simply they try to repeat the experience. However, in most cases, conscious and regular masturbation does not begin until adolescence. Boys are often taught how to masturbate by other boys, or they hear about it in their conversations. Since boys seem to discuss sexual matters much more openly than girls in our society they usually obtain more sex information at an earlier age. In contrast, girls are more likely to discover masturbation alone and by chance, while some of them are introduced to it through "**petting**" or "**sex play**", and some others read about it in erotic books or magazines. There are many recorded cases of girls who masturbate for years before they realize what they are doing, they may then be quite shocked and feel guilty about it. After all, most



people in our culture consider masturbation wrong and sinful, as a result many boys and girls feel a double guilt. They seem to displease God and to ruin their health at the same time. In some medical textbooks, masturbation is seen almost exclusively as an adolescent activity, in actual fact, however, it is also practiced by many adults, including some married couples as well. At some time, sexual research indicated that addiction to masturbation was considered as a sign of sexual immaturity, and an end result of the individual's mal-sex development. However, up till now, **guilt complexes over masturbation** are still remaining as a very significant factor in the psychosexual development of many individuals in our society.

We know that for many teenagers in our culture masturbation is the most common or even the only sexual outlet. However, this does not mean that it is typical for the earlier phases of human sexual development and that it is practiced only during adolescence. It simply means that adolescents do not have sufficient opportunity for sexual intercourse because they are not yet married, as such, adults who sometimes masturbate when they cannot or have not got the chance to get married, have no reason to feel that they are immature.

## **Religion and History**

Although masturbation was considered a major sin by the ancient Jews, as well as the catholic church, it was the Protestant who singled masturbation out as a substitute for the devil!. In actual fact, all religions condemn the practice of masturbation, because only the proper sexual relations between males and females can lead to reproduction and thereby ensure the survival of the species and of the social group. Any society that developed a bias in favor of sexual self-stimulation, homosexual intercourse, or sexual contact with animals would simply condemn itself to extinction.

In the 18th century (1710), an anonymous pamphlet appeared in England under the title, "**Onania, or the Heinous Sin of Self-Pollution and its Frightful Consequences in Both Sexes**". The author, named Bekker, offered his readers a summary of the old theories about the dangers of "wasting" semen. He called this behavior "**Onania**" in reference to Onan, a biblical character who was punished by God for refusing to impregnate his brother's widow. As required by custom, he engaged in coitus with her, but prevented any possible pregnancy by practicing the withdrawal method of contraception (**coitus interruptus**). Bekker's pamphlet was translated into several European languages and went through more than eighty editions.

In 1760, Tissot, a respected Swiss physician published an influential book entitled: "**Onanism and the disorders produced by masturbation**". The author claimed that masturbation was not only a sin and a crime but that it was directly responsible for many serious diseases such as: "deterioration of eyesight, disorders of digestion, impotence, ... and insanity". His views became official medical doctrine and physicians all over the West found masturbation at the root

of almost every disease !. In the 18th and 19th centuries, physicians believed that masturbation caused a variety of illnesses, (Gilbert); these diseases we now diagnose as tuberculosis, rheumatic fever, epilepsy and gonorrhea... For about 150 years, most medical authorities seemed to agree with Tissot, the famous Swiss physician, who stated that: "the loss of one ounce of seminal fluid was equivalent to the loss of forty ounces of blood !".

## Old Medical opinion

By 1812, when Benjamin Rush, known as the father of American psychiatry, published his "Medical Inquiries and Observations Upon the Diseases of the Mind", the harmful effects of masturbation were taken for granted. According to Rush, onanism caused not only insanity but also "seminal weakness, impotence, tabes dorsalis, pulmonary consumption, dyspepsia, vertigo, epilepsy and loss of memory"...

Indeed, till some years ago, the Venderbilt Clinic in the Presbyterian hospital, a weekly held "**Masturbation clinic**", where patients paraded before attending physicians and medical students, as examples of the evil and pathological consequences of "Sexual self-abuse", namely masturbation and its complications. In the 18th century, the medical profession pointed the way to discover the secret masturbators; general apathy and laziness, dim or shifty eyes, a pale complexion, a slouching posture, or trembling hands were considered symptoms of secret "**self-abuse**".

## Old medical treatment

Once the diagnosis had been established, the "therapy" could begin, a confirmed masturbator was usually given a special diet. Different doctors recommended different diets, not unlike their modern colleagues who fight obesity nowadays!. It was also believed that a hard mattress, a thin blanket, frequent washing with cold water, and generally low room temperatures were helpful in breaking the secret habit. In addition, simple and practical clothing was considered essential, as a matter of fact, there was even a trend to introduce skirts for men and to abolish wearing trousers altogether, because they are too warm and irritate the sex organs!.

In the 19th century, Henry Maudsley the greatest British psychiatrist of his time, described masturbators as mad and potential killers and it seemed only prudent to have them locked up in an asylum, because "**masturbatory insanity**" was considered incurable in its later stages... All medical science could really do was to concentrate on the prevention and early detection of the disease. Parents were therefore advised to tie the hands of their children to the sides of the bed !, or to make them wear mittens or gloves spiked with iron thorns!. Special bandages and "**chastity belts**" were to render the sex organs inaccessible. Doctors invented ingenious contraptions and bizarre devices to protect people from abusing themselves, (one of the more bizarre of these inventions was a



fantastic "erection detector"!, which rang a little bell in the parent's bedroom as soon as their son had an erection in his sleep!).

## Old surgical treatment

Finally, if everything else failed, surgery was recommended. The most popular surgical treatment was **infibulation for males** (i.e. putting a metal ring through the foreskin, thus preventing an erection)!, and **clitoridectomy for females** (i.e. cutting out the clitoris)... As late as 1910, this operation of clitoridectomy was done as a treatment of chronic masturbation for females in England. One cannot help but feel that the medical authorities who administered these painful, dangerous and useless treatment were not so much interested in preventing masturbation as in punishing their unfortunate patients. Indeed, some guilt ridden patients punished themselves by mutilating their bodies and sexual organs or even committing suicide sometimes ...

## Frequency

Over the last hundred years, one can observe a gradual softening of the original harsh psychiatric attitude toward masturbation. As a result, past description of "self-abuse" was perhaps only a "bad habit", or a symptom of "arrested sexual development". Still, masturbation remained potentially harmful because many doctors insist that a young man's proper physical growth depend on the preservation of his semen and that he could therefore weaken his body by wasting it prematurely; up till now this theory lacks enough evidence.

It became safe to warn only against "excessive" masturbation, and this proved to be a comfortable fallback position, because "excess" is a relative term and it was never clearly defined and any prospective masturbator was nevertheless deterred. While some people never masturbate at all in their entire lives, others masturbate several times a day, thus, certain doctors denounce masturbation as a **non-productive, non-creative and parasitic habit**. They warn that any excess will turn into a false lead like alcoholism and compulsive gambling. Some educational writers also hint that masturbation might lead to egoism, loneliness, or a hatred of the opposite sex.

## Recent research

A summary of a recent research about masturbation performed by (Miller and Lief, 1978), related the following facts about **masturbatory attitudes, knowledge and experience** on **30,000** volunteered medical students in the U.S.A. It revealed that male masturbators amounted to 97% among the male American population, while female masturbators were only 79%. (The tests applied were termed SKAT for shortening).



## Questionnaire

The types of questions put forward to the male and female medical students whether they were white, black or Latin American were:

- (1) Relieving sexual tension by masturbation is a healthy practice ?**
  - Strongly agree.
  - Agree.
  - Uncertain.
  - Disagree.
  - Strongly disagree.
- (2) Frequency of masturbation ?**
  - Less than once per week.
  - Two to three times per week.
  - Four to five times per week.
  - More than five times per week.
- (3) Certain conditions of mental and emotional instability are caused by masturbation?**
  - True.
  - False.

## Conclusions

- The outcome of this research revealed that males have more liberal attitudes towards masturbation than females; on the other hand, graduated female students i.e. female doctors are more liberal and free than male doctors about the practice of masturbation.
- The sexual attitude about masturbation whether male or female, the knowledge and experience about it, increase with education. Naturally, those who never masturbated are more conservative about this sexual habit and are less knowledgeable about it.
- 16 percent of the medical students believe that masturbation is a cause of mental illness, while more resident doctors share this view.
- The incidence of masturbation among males is 97 percent and among females is 79 percent; out of these females:
  - a. 19 percent masturbate actively before the age of 10 years.
  - b. 34 percent started masturbation before the age of 13 years; (naturally, one must remember here the effect of menarche on the sexual activities of girls).
  - c. About 45 percent, masturbated before the age of 16 years.

- It is interesting to record here that early female masturbators have less heterosexual experiences as compared with late masturbators, (i.e. they were not interested in coitus).
- Virgin males and virgin females are more likely to have never masturbated, but if they did, then it is done later in life and with lower frequencies and they are more conservative and less knowledgeable about masturbation than the non-virgin males or females.
- 76 percent of these medical students believe that masturbation is healthy; in another sex research performed by Prof. Hunt in 1974, 80 percent of his volunteers confessed that masturbation to them was not wrong. Comparing these percentages with other research volunteers of a lower social level of society and with less education and more conservative attitudes, it was found that both Prof. Kinsey and Prof. Cotton reported much lower percentages. No wonder that in the last few years there has been a demand for greater female sexual liberalism as regards marriage and sexual experience...
- An interesting finding of this research suggests that there is nowadays a group of females, who are early masturbators and who have inhibited heterosexual attitudes and behavior. This group of women are narcissistically invested, who turn to their own bodies as a defense mechanism against the anxiety of heterosexual experiences and its unfortunate failures or usual disappointments. They may turn out to become homosexually oriented, developing later a full lesbian attitude. They are usually the victims of parental repression and punishment, sometimes due to a very harsh infantile correction during their sexual development and usually with minimal or no stable family ties or parental love.
- Another finding about males, was that they were found as we mentioned earlier to have a higher incidence of masturbatory activity, extramarital relations, violent sex crimes, premarital sex, and are more homosexuals than females. They indulge more in coitus during adolescence, as well as having more sexual adventures.
- Deformity of the penile shaft when fully erected, has been noticed among some chronic manual masturbators, synstroped deformity was recorded among right hand masturbators, while the opposite was noted with left hand chronic masturbators, namely dextroped penile inclination when fully erect. Sometimes ejaculatory incompetence, as a complication of chronic masturbation was mentioned before in the chapter of sexual inadequacy.
- When the anus is penetrated chronically during various abnormal sex acts, such as: sodomy (receiver), or manually by the fingers for additional sexual pleasure, e.g. during masturbation, or through introduction of solid objects e.g. vibrators, for the achievement of anal sexual pleasure; and strangely enough, to conceal valuables or small smuggled objects e.g. drugs and

diamonds. Over time and as a result, the repeated trauma inflicted causes excessive dilatation or even rupture of the external sphincter muscle fibers with consequent anal incontinence. "Fist fucking" is the term used when the whole hand is passed into the rectum...

- The fashionable very tight jeans, frequently worn nowadays, by both males and females are possible signs sometimes of expression of voluntary or involuntary masturbatory activities. The results of a research published recently denoted that there were reported cases of unexplained leucorrhoea, pruritus vulvae as well as pruritus ani, caused by the continuous friction and excessive heat developed, because of the continuous usage of these very tight jeans.
- It is worth mentioning here, that some types of male infertility are successfully treated nowadays, since new investigational methods have been developed to show a substantial retrograde flow down the internal spermatic vein. This occurs whenever a true varicocele is palpable, the techniques include retrograde phlebography of the internal spermatic vein, infrared and contact thermography; the idea behind is to show a temperature increase over the affected half of the scrotum. Color Dopler sonography greatly helps in the diagnosis of varicosity or varicocele. Surgical suprainguinal ligation of the internal spermatic vein is the method of choice, with claims of subsequent improvement in the seminal picture, ranging from 30% up to the impressive percentage of 80%. Because heat is considered to be detrimental to the sperms, influencing the metabolism of spermatogenesis; males are advised to wear baggy underwear, avoiding the usage of tight pants, as well as the continuous application of iced cold water, through scrotal dip baths for several months.

## **Comment**

**"No other form of sexual activity has been more frequently discussed, more roundly condemned, and more universally practiced than masturbation".**

- Dearborn, 1967.



# 14

## **SEXUAL GLOSSARY AND THE PARAPHILIAS**

- **Sexual Terminology.**
- **Abnormal Sexual Activities.**
- **Treatment.**

# SEXUAL GLOSSARY AND THE PARAPHILIAS

**Paraphilias:** Sexual deviations or sometimes called sexual perversions and abnormal sexual acts.

**Erotic:** Sexually stimulating.

**Erogenous zones:** Sexually stimulating areas of the human body, such as, the mouth, lips, tongue, breasts, nipples, buttocks, genitals and anus.

**Auto-eroticism:** Self induced sexual pleasure, masturbation is a gross example in both males and females, while a mild example is intentional dressing in tight fitting jeans, mini (very short) skirts and tiny sexy underwear.

**Oral eroticism:** Mouth sexual pleasures, a good example is kissing both light and deep kissing.

**Anal eroticism:** It is sexual pleasurable sensations felt in the region of the anal orifice.

**Libido:** The sexual impulse or sexual hunger or desire, it is also referred to as the sexual energy or the sexual desire of a person male or female. It is experienced as specific sensations which move the individual to seek out or become receptive to sexual experiences. These sensations are produced by the physical activation of the specific neural system in the brain.

**Orgasm:** The pleasurable sexual climax of the sexual act of any sexual activity; in the male, it results in the ejaculation of semen in the adult mature man. While in females, it is characterized by contractions of the uterus, anus and orgasmic platform and a satisfying state or states of sexual pleasure followed by relaxation after an already vaginal transudation.

**Sexual petting or foreplay to coitus:** Also referred to as precoital petting, is the act of exploring and touching each other's erogenous zones including the sex organs; in other words, it is sexual contact that stops short of coitus.

**Impotency:** It is an example of male sexual dysfunction, a variety of male sexual inadequacy. It is divided into primary and secondary types, it was believed in the past that about 85% of cases are psychogenic while the rest are considered organic. A good example of organic causes are the neuropathies of diabetes amounting to 59% and some endocrinal syndromes. Recent research estimated organic causes to be nearly equal to psychogenic causes. Impotency is not an absolute hindrance to perform a sexual act because some males could get an orgasm and ejaculate with a limp penis, while many others cannot and are severely frustrated as a result, especially when repeated failures are recorded with a non-cooperative or sexually ignorant female partner.

**Frigidity:** The inability of a female to achieve or reach an orgasm during any type of sexual activity; it should be differentiated from the condition termed "lacking orgasmic capacity"; frigidity is an example of female sexual inadequacy or dysfunction.

**Vaginismus:** It is a condition of involuntary spasm or constriction of the musculature surrounding the vaginal outlet and the outer third of the vagina. This psychophysiologic syndrome may affect women at any age and may vary considerably in severity. The most dramatic instances of vaginismus often present as unconsummated marriages, since penile insertion into the vagina may not be possible due to spasm, resistance and attendant pain; at the other end of the clinical spectrum are cases in which coitus is possible but painful (dyspareunia).

**Karezza or coitus reservatus:** A certain religious group of the past actively encouraged men to practice coitus without ejaculation. This kind of coitus was supposed to last for several hours, aiming at furthering a couple's spiritual growth!...

**Erotomania:** An excessive sexual urge which could never be satisfied in both sexes e.g. nymphomania and satyriasis.

**Nymphomania:** Excessive sexual desire in the female, which is not satiated, never satisfied. Its occurrence is rare and it should be well differentiated from the healthy normal multiorgasmic capacity of many normal females.

**Satyriasis:** Unsatisfied sexual appetite in the male, unsatiated, it should be differentiated from hypersexuality. As a matter of fact nymphomania and satyriasis are extremely rare and abnormal states of hypersexuality.

**Tongue kissing:** Inserting the tongue into the mouth of the sexual partner for the purpose of increasing sexual excitement, sometimes referred to as deep kissing.

**Bitting kiss:** The act of biting and kissing the flesh of a person during increased sexual excitement, an exaggeration of this condition is biting the breast nipples during sexual excitement.

**Orgenitalism:** Various forms of mouth and genital contact aiming at sexual pleasure, it is referred to sometimes as **buccal onanism**, which is an act of oral masturbation and it generally refers to the acts of fellatio and cunnilingus.

**Fellatio:** The act of taking the penis erect or flaccid into one's mouth and sucking it by a male or female partner or by himself...! The international scandal of Monica Lewinsky is a proof of the spread of this perversion in the world due to its prevalence in abnormal sex films.

**Cunnilingus:** The act of licking, tonguing, sucking or mouthing the external female genital organs namely the vulva, clitoris and labia.

**Anilingus:** A sexual deviation wherein the person male or female derives sexual excitement and satisfaction by licking the anal area of another person.

**Fetishism:** In this condition, sexual arousal occurs principally in response to an object or body part that is not primarily sexual in nature. The fetish object is generally used during masturbation or incorporated into sexual activity with another person in order to produce sexual excitation. Often the fetishist collects such objects; in some cases, the behavior involves stealing the objects, which appears to contribute an added sense of risk and mystery. In some men and



women, sexual arousal to the point of orgasm can occur only in response to the fetish object, real or fantasized. Objects such as: articles of clothing e.g. gloves, shoes, panties, female nickers (underwear) and suspenders; all these articles enter into masturbation fantasies or other sexual activities but they are always necessary for sexual gratification.

**Breast fetishism:** The breasts of a female as the preferred part of a woman's body, capable of arousing the greatest amount of sexual pleasure, other examples are buttock's fetishism. The breasts in U.S.A. are well known to be admired by most American males, no wonder, they are mocked and described for fun as immature sexually being bosom attracted!.

**Transvestitism (Fetishistic cross dressing):** It is the act of wearing clothes belonging to the opposite sex for erotic purposes and for sexual stimulation. Transvestitism is more common among males than among females, contrary to popular belief, most transvestites are heterosexual in orientation mainly but it is also practiced by homosexuals and lesbians. Stoller, defines the condition as : "a condition in which a man becomes genitally and sexually excited by wearing feminine garments", it should be clearly differentiated from transsexualism.

**Transsexualism:** The word comes from transsexual (from Latin trans: across and sexualis: sexual). It is a disturbance of **gender identity**, in which persons are convinced that their gender identity is different from their physical identity. In other words, there are persons with male bodies who consider themselves females and there are persons with female bodies who consider themselves males. Particularly after puberty, such people become very uncomfortable with their anatomical appearance and they try everything in their power including "**sex change operations**" and modern hormone therapy to make the body conform to their self-image. Thus, a man may acquire so many female physical characteristics including breasts and an artificial vagina, that he can generally pass for a woman after surgery. To a lesser extent, the reverse is also possible, it is easier for a surgeon to construct a vagina in a male than a penis in a female. There are gender identity clinics in various parts of the world and as much as few thousands have undergone sex change surgery. Unfortunately, there are also some rare cases where parents simply refuse to accept the biological sex of their child, one example is the mother who deliberately forces her infant daughter into the role of the son she had really wanted with an evident disastrous sexual role assignment in the future.

**Penis envy:** It is the envious feeling of a female and her deep passion to possess a penis, it is also known as **Castration complex**, **Mutilation complex** and **Anatomical loss**; most girls feel it mildly and come out of it during their normal sexual development. The condition is manifested openly among active lesbians, one being aggressive, mounts a passive lesbian and penetrate her while using an artificial penis simulating coitus (tribadism), as such they do satisfy their ego...

**Dream symbolism:** The mechanism of substituting an object or a person for another, during sleep for example, elongated objects like a pencil or a broom or a snake may represent the penis and are symbolic of the male sex organs.

While a hole or a cavity may be symbolic of the vagina or the female sex organs.

**Electra complex:** A strong neurotic attachment or fixation of a daughter for her father, it is termed after “**Electra**” a legendary Greek princess who after the death of her beloved father helped kill her mother who had murdered him.

**Oedipus complex:** A strong emotional and erotic attachment of a son for his mother and a feeling of rivalry toward the parent of the same sex. It is after the legendary Greek king Oedipus, who unknowingly killed his father and married his mother.

**Masochism:** After the famous Austrian writer Baron Masoch in the 19<sup>th</sup> century. It denotes the feeling of sexual pleasure when being humiliated or experiencing physical or mental pain.

**Sadism:** After the French writer De Sade in the 18<sup>th</sup> century; it is acquiring sexual pleasure while causing your sexual partner or someone else physical or psychic pain. Sadism can be very harmful because in some cases it may lead to sexual assault or even murder.

**Sadomasochistic:** One who at times is cruel (sadistic) and causes another person pain and at other times develops feelings of self-pity or experiences a “need to suffer” (masochistic), as a means of atonement i.e. sexually pleased, the end result being sexually satisfied.

**Bondage:** It is the attainment of sexual gratification through being tied, restrained, imprisoned or humiliated by another person or by oneself.

**Flagellation:** A sexual deviation involving the act of whipping the other sexual partner or one’s self.

**Narcissism:** It is excessive self-love, tendency to self-worship, excessive or erotic interest in one’s own personal features, hence Narcissus from the Greek (**Narkissos**) a youth who fell in love with his reflection in water. When the mirror is used extensively by both a male or female person afflicted by this condition staying long hours admiring his or her naked body is another example.

**Incest:** A sexual deviation where sexual relations are practiced between members of one’s own family, such as, between father and daughter, son and mother, brother and sister.

**Bestiality:** A form of sexual deviation that involves sexual contact between a human being and an animal or a bird. Kinsey’s report about home pets revealed that bestiality is prevalent in the farms where there is common sexual contact with the sow and the calf for males while in some countries, females engage sexually with dogs performing various sexual activities including actual coitus. This perversion is also termed **Zoophilia**.

**Homosexuality:** It denotes sexual relations between persons of the same sex, the prefixes hetero- and homo-simply mean “different” and “same” in the Greek language.

**Bisexual:** A sexual interest in both sexes, the capacity for sexual pleasurable relations with either sex. Also, **ambisexual** may be used to describe



someone who is erotically attracted to partners of both sexes.

**Sexual apathy:** It is the dislike sexually of one of the opposite sex i.e. loves his or her own sex.

**Lesbianism:** A female homosexual love, female homosexuality, the erotic love of one female for another or a girl for another female. The term was started after the island of Lesbos, home of the homosexual ancient Greek poetess **Sappho**, the relation is also known as **Sapphism**. The relationship may consist of kissing by all its degrees, breast fondling, mutual masturbation i.e. they masturbate for each other or they may apply cunnilingus or tribadism.

**Tribadism, tribade:** The act of one female lying on top of another female while simulating coital movements so that the friction of the clitoris and the adjacent area brings about sexual excitation and ultimately an orgasm to her or to both of them. One female is usually active, simulating or taking the active role of the male and the other is passive or acting as a passive female usually preferring to lie in the lithotomy position.

**Troilism:** The word is derived from the French language "Trois", meaning three, denoting a sexual deviation in which three people participate in a series of paraphiliac or pervert sexual practices. The sexual alliances may consist of two men and one woman or two females and one male.

**Sexual criminal or the sex offender:** Men whose sexual behavior is destructive and victimizing, violating as such the society rules. The offenses may include, incest, child molestation, rape, exhibitionism, obscene phone calls or literature and voyeurism.

**Voyeurism:** A voyeur or "**Peeping Tom**" is a person who obtains sexual gratification by witnessing other persons in a sexual or non-sexual state of nudity. Voyeurs are often sexually frustrated individuals who feel too inadequate to establish a normal regular sexual relationship.

**Pedophilia:** An adult and a child sexual relationship, performing abnormal sexual activity, it may include heterosexual or homosexual activity. **Pederasty** also means love relationship between a man and a male preadolescent involving oftenly sexual intercourse, they are also called child molesters or pedophiles.

**Zoophilia:** It is the use of animals as a preferred sexual object or when it is the only exclusive method of producing sexual excitement...

**Biological sex:** It is defined as a person's maleness or femaleness. It is determined on the basis of five physical criteria; chromosomal sex, gonadal sex, hormonal sex, internal accessory reproductive structures and the external sex organs. People are male or female to the degree in which they meet the physical criteria for maleness or femaleness. Most individuals are clearly male or female by all five physical criteria. However, a minority fall somewhat short of this test and their biological sex is therefore ambiguous (hermaphroditism).

**Gender role:** It is defined as a person's masculinity or femininity. It is determined on the basis of certain psychological qualities that are nurtured in one sex and discouraged in the other. People are masculine or feminine to the degree



in which they conform to their gender roles. Most individuals clearly conform to the gender role appropriate to their biological sex. However, a minority partially assume sometimes a gender role that contradicts their biological sex (transvestitism), and for an even smaller minority such a role inversion when complete is called (transsexualism).

**Sexual orientation:** It is defined as a person's heterosexuality or homosexuality. It is determined on the basis of preference for the sexual partners. People are either heterosexual or homosexual to the degree in which they are erotically attracted to partners of the other or same sex. Most individuals develop a clear erotic preference for partners of the other sex (heterosexuality). However, a minority are erotically attracted to both men and women (ambisexuality) and an even smaller minority are attracted mainly to partners of their own sex (homosexuality).

**69:** The slang term "**sixty nine**" or French spoken "**soixante-neuf**" is used to describe a form of oral intercourse in which the partners simultaneously lick each other's sex organs. In doing so, the position of their bodies in relation to each other is similar to that of the inverted numerals in the number "**69**".

**Sodomy:** It means anal intercourse, after the ancient bililical city of "Sodom" also known as "buggery" after a heretical sect in the country of Bulgaria, the members of which were denounced as "**buggers**" (from Bulgars).

**Gerontophilia:** Choosing sexual activity with an old woman.

**Necrophilia:** Choosing sexual activity with a dead body.

**Pygmalionism:** Choosing sexual activity with a statue.

**Frottage:** A person deriving his sexual satisfaction mainly from rubbing his body and sex organs against that of his partner or someone else.

**Oralism:** A person deriving maximal sexual satisfaction from engaging in oral intercourse mainly, (fellatio).

**Analism:** A person deriving maximal sexual satisfaction from engaging in anal intercourse mainly.

**Kleptolagnia:** A pervert who instead of engaging in normal coitus, he or she derives sexual satisfaction mainly from stealing something.

**Pyrolagnia:** A pervert who instead of engaging in normal coitus, he or she derives sexual satisfaction mainly from setting fires (Arson).

**Urolagnia:** A pervert who instead of performing normal coitus, he or she derives sexual satisfaction mainly from playing with own or partner's urine.

**Coprophilia:** A pervert who instead of performing normal coitus, he or she derives sexual satisfaction mainly from playing with own or partner's feaces.

**Exhibitionism:** It is the deliberate exposure of sex organs under inappropriate conditions with the intention of evoking a response in the observer. Although sexual excitation is usually produced in the performer by the act of exhibitionism, it is not invariably present even if desired; further, although

exhibitionism has been generally regarded as a paraphilia exclusive to males, there are isolated reports of female genital exhibitionism. If exhibitionism occurring as a result of organic brain disease or psychosis is excluded, most cases involve the deliberate attempt to obtain sexual gratification via the act of exposure and the unwilling viewer's response. The exhibitionist may or may not masturbate coincidentally with exposing himself- in a significant percentage of cases, the exhibitionist may be impotent or have other sexual problems in heterosexual relations. In some cases, the exhibitionist is impotent even during the act of genital exposure. Most authorities suggest that exhibitionists are usually outwardly passive, shy or dependent and they are unlikely to commit rape. The exhibitionist often follows a particular pattern of behavior leading up to his genital exposure (for example, returning to the same street corner or using his automobile, ostensibly to permit a quick getaway)!

**Lingam:** It is the abnormally huge erect penis as a symbol of creative entity, known also as "**Phallic symbols**", represented often in old Greek sculpture as well as in Ancient Egypt e.g. God Menn (god of fertility) in Upper Egypt temples.

**Sexual aversion:** This condition is a consistent negative reaction of phobic proportions to sexual activity or even to the thought of sexual activity. Although it may be situational, occurring only with a particular partner or only in a heterosexual contact but not during homosexual activity. The typical case of sexual aversion involves a spreading negative reaction to all aspects of sexual contact with another person. In some instances, the phobic nature of the response is manifested physiologically by profuse sweating, nausea or vomiting, diarrhea, or palpitations, but in other instances the phobic components are internalized and do not appear in this drastic manner. Sexual aversion may occur in either males or females, but the preponderance of cases involves females.

**Inhibited sexual desire:** It appears realistic to view libido as a complexly determined phenomenon combining certain aspects of biologic (instinctual) components, probably mediated largely by hormonal stimuli, with elements of psychosocial conditioning. It is uncertain whether there are any people who are truly asexual in the sense of never having feelings of sexual desire; however, clinicians are well aware that some people repress or suppress their sexual feelings so thoroughly that it may appear that they have no sexual desire. Frank and colleagues recently found that 35 percent of women and 16 percent of men, in a group of relatively well-adjusted and well-educated married couples reported disinterest in sexual activity. Low libido may be the result of either organic processes e.g. any chronic disease or psychosocial factors. Although low libido is likely to be a sexual problem when a marked discrepancy exists between the levels of sexual interest of two persons in a marriage, there are certainly instances in which an acceptable accommodation is made to such a divergence and no problem results. For example, a person with low libido may agree to participate in sexual activity when his or her partner requests this, regardless of the person's general lack of interest. Alternatively, in some couples a workable solution is reached by allowing- or even encouraging- the partner with higher libido to pursue sexual activity outside the relationship i.e. to have another wife in addition.



**Pornography:** (literally: writing about prostitutes, from Greek *porne*; prostitute and *graphein*: to write). Often called **obscene material**; it could be a sex show, movies, records, pictures, books and magazines. Pornographic entertainment is not an invention of our time because in Europe sexually explicit and even intentionally obscene stage shows date back to Greek and Roman antiquity. About 250 years ago, European aristocrats attended such abnormal sex shows in their own private theaters.

**Priapism:** The term priapism refers to a persistent state of painful penile erection that is usually independent of sexual arousal. Although it may be impossible to determine the etiology of priapism, the most common causes include sickle cell anemia, polycythemia and leukemia. In these cases, altered microvascular blood flow dynamics occur as a result of sludging of blood; the resulting venous stasis blocks normal mechanisms of penile detumescence. Priapism may also result from venous obstruction due to malignancy, from spinal cord injuries, from penile trauma resulting in hematoma formation and from local reflex stimuli such as those associated with phimosis, urethral polyps, urethral calculi or prostatitis. In some instances, priapism may be drug-induced, thioridazine, heparin, testosterone, and hydralazine have been reported to cause this disorder. It may happen as well due to an over dose during therapeutic treatment either orally or by intracavernosal injections for impotency.

Priapism is an emergency, since venous drainage to the corpora cavernosa must be restored and damage to erectile tissue must be minimized, if the disorder is not brought under control, ischemic changes may occur in penile tissue. Treatment range from the application of ice packs and sedation to the use of a variety of surgical shunt approaches. Therapeutic defibrination by the use of proteolytic enzymes given intravenously has also been reported to be successful. Anesthetic blocks, corporal aspiration of trapped blood, and use of low-molecular-weight dextran have also been advocated. However, there is no single approach that will alleviate the priapism, while guaranteeing successful restoration of the erectile mechanism.

## **Treatment of the Paraphilias**

The literature describing treatment approaches to the paraphilias is rather fragmentary. Most reports discuss results obtained in a small number of cases, have no formal control group or fail to provide specific criteria for evaluating the outcome. Only brief mention will be made of the range of therapeutic techniques that have been utilized, since this area appears to be under current reappraisal.

**Aversion therapy** is a type of treatment used to produce a reduction in an undesired behavior via a conditioned emotional response, by suppression of a punished response or by the development of an avoidance response. Aversion therapy methods have included the use of electric shock and chemical induction of nausea and vomiting, usually in combination with exposure to photographs depicting the undesired behavior.



Other behavior modification techniques that have been used to treat the paraphilias include positive conditioning of desired behavior, systematic desensitization and biofeedback and penile plethysmography. A promising method that utilizes principles of aversion therapy without electric shock or other physical harm is a technique known as **covert sensitization**. The subject imagines aversion scenes, (such as being caught by the police or being discovered by family members) immediately after being confronted with a sexually arousing scene, either visually or by fantasy. Another novel approach offering some promise is the use of boredom in the reduction of undesired sexual interests via a procedure involving verbalizing such fantasies while engaging in prolonged masturbatory episodes.

In Norway, **asexualization** was tried in the past as a method of treatment for confirmed sex criminals especially those who were confirmed sex rapists and serial sex killers. Oestrogen was given to these males in prison to change and abolish their vicious sexual character; evidently they ended with gynaecomastia and impotency ...

Both **hypnosis** and **psychotherapy** have been employed with varying degrees of success in the treatment of paraphilias. In addition, combined approaches utilizing **pharmacologic therapy** (in particular, with the use of **antiandrogens** such as cyproterone acetate or medroxyprogesterone acetate) and psychotherapy or **behavior modification** have been gathering proponents and appear to offer a high degree of efficacy. However, there is no single approach that will suit all such cases. At the moment we can only hope for the future development of a greater understanding of these behavioral patterns.

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